The Education Digest

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Money Is the First Necessity for Better Quality

Expanded Horizons

WILLIAM G. CARR

THE centennial year of the National Education Association, suitably celebrated in many ways throughout the nation, has come to a close. Now it is time to turn our thoughts toward the future. How far ahead? Another century is a good round figure. The trouble is that in today's fast-changing world, to look ahead 100 years is an exercise more of fancy than of reason. Let us then be content with a shorter view—say 20 years. This is long enough to give us perspective and short enough to allow most of us—with good fortune—to be on hand for the checkup.

So let us consider American education in these coming 20 years. Let us begin at the beginning. Children will still be born illiterate and self-centered. They may in the years ahead learn more and faster, but each new generation will constitute, in effect, a fresh invasion of barbarians. Their parents will still regard them with a mixture of pride, awe, and amazement. Their teachers will still greet them with a wary and affectionate skepticism.

Youth will still be lovable and perplexing, demanding, inspiring, and aggravating. They will still be all of America—all of its undeveloped resources, all of its hopes for the future. Their names will be Smith and Jones, McGregor and Wong, O'Collins and Gonzales, Dombrowski and Polyzoides. Their daily lessons will give proof of budding genius, of stalwart mediocrity, of limited horizons. They will come to school smelling like fresh-cut grass, dried angleworms, peanut butter sandwiches, strong soap—or the absence of strong soap—bubble gum, sneakers, honeysuckle, onions, and (at more advanced ages) of mother's Chanel, dad's shaving cream, the surreptitious cigarette, and the all-obliterating clove. They will be shy or boisterous and sometimes both at once. They will come from homes torn by dissension, racked by disease, stained by crime, as well as from

William G. Carr is Executive Secretary of the National Education Association, Washington, D.C. Reported from an address given before the Conference of the Department of Rural Education of the NEA in Denver, Colorado, October 13–16, 1957.

homes of harmony, health, and civic virtue. They will adore their teachers and be angry with them; they will scoff at them and secretly imitate them.

No, the children will not change. But in the next 20 years there will be a great change in American education. Its outstanding characteristic may be summarized in one word: quality.

Yes, quantity, also. But without denying the problems which mounting enrolments present, I still say that our frontier for the next 20 years is quality. For, basically, in our first century, the battle of quantity has been won. We have been concerned that every child get into school. Now we must see how much each child gets out of school. To achieve—in the next 20 years—the quality of excellence needed, changes in organization, curriculum, and methods will occur. Let me name a few of them.

First, the most urgent change for the immediate future is more time for teachers to help individual children. Crowded schools and half-day sessions today increase nervous tensions of teachers and students, aggravate discipline problems, lower the standard of achievement, limit the adaptation of instruction to individual differences, and—to complete the vicious circle—hamper the recruitment of needed additional teachers. These conditions must and will be remedied in the next 20 years, not that teachers may lead an easy life, but rather that teachers may devote their energies more fully to their most essential tasks.

Second, our search for quality in education must face the current proposals for adjusting salaries in accordance with some estimate of the quality of service rendered by each teacher. The case for merit rating should be evaluated by the profession with great wisdom and complete candor. To those who want so-called merit salary schedules, I think we should say something like this: We teachers, too, want excellence and we want to reward excellence. We want an excellent teacher for every child—not for just a few children. We think the way to achieve that is to begin with excellence in preparation and selection of *all* teachers. But we can't begin at the beginning until the salaries offered will attract and hold excellence. When we get salaries that will recruit the best available people, then, and only then, will it make sense to seek ways to give further recognition for superior performance. Meanwhile, we shall keep an open mind regarding the discovery of practical methods to identify superior service. But we cannot compromise our goal of much higher standards for all children in favor of slightly higher standards for a few.

Third, the schools will in many ways modify what they teach and how they teach it. Some of these improvements will occur through wider application of effective methods already available and of sound knowledge already established. I

cannot predict that American education will "return to the fundamentals" for, of course, it has never left them. We can, however, say that in teaching the fundamentals and in preparing for useful employment the steady progress of recent years will be maintained and, wherever possible, accelerated.

A fourth aspect of quality in education during the next 20 years will be a great enrichment in all those occupations which we broadly call cultural. Constructive recreation and adult education will flourish. In the coming years the schools will seek to stimulate curiosity and to launch young people on a career of life-long learning. Schools will never be finishing schools; they will always be beginning schools; their chief aim will not be to complete an education but to commence one.

Fifth, we shall see in the next 20 years a great improvement in the use of modern teaching materials. Books, pictures, exhibits, models, recordings, motion picture, radio, and television, as well as other tools and devices now undiscovered or underdeveloped, will be considered just as necessary items of classroom equipment as pencil and paper, chalk and blackboard are today. It is safe to predict that in such important and difficult fields as science, mathematics, and foreign languages the new tools will be found especially helpful.

Sixth, our schools will turn with renewed diligence and skill to the task of preparing for citizenship in the world of today and tomorrow. We shall realize, as the next few years pass, that it is not sufficient to take all the tricks in the diplomatic card game, or to win the race for intercontinental missles, or to train more engineers than Russia, if, in so doing, we fail to teach, by precept and example, the skills and duties of responsible citizenship. One shrinks a little from uttering the stale word "crisis." But this time, surely, it is justified. Today for the first time there exists a force that can in a few hours destroy all the accumulated wealth in homes, factories, and markets, all the delights of music and the arts, perhaps all of human life on this planet. Everything we cherish is subject to annihilation beyond repair, beyond replacement, even beyond remembrance. To deal with this ultimate dilemma, we need to learn and to teach a new breadth of vision, an ability to listen with humility and to speak with courage, a freedom from prejudice in all its ugly manifestations. For such purposes, a minimum education simply will not do. Only the best possible education can confront the dangers and merit the opportunities of the future.

WHAT IS NEEDED?

What is needed to make these and other imperative improvements in the quality of education? Better buildings and equipment? Such capital investments require money. Plenty of teaching materials? They do not cost very much money, but they cost more than most schools

can spend right now. Answers to problems in school organization and instruction? We can get answers through educational research. And that costs money. Competent, experienced, well-prepared teachers and school administrators? Their services cost money on a scale that can compete for talent with other occupations. Smaller classes, more individual guidance, and more special classes to meet unusual needs? These require, as I have said, more teachers and more money.

The high quality of education that America needs and will get in the next 20 years cannot be bought in the bargain basement.

Money is not the only necessity for better quality in education, but it is the first necessity. Right now we could make rapid and substantial improvements in the quality of our schools if we had the financial resources to do as well as we already know how to do.

We do have a very good case for properly financing high-quality education. That case rests, first, on high ideals—the stubborn conviction that every human being should have a fair chance through a high quality of education to develop to the full whatever capacities he may possess. Education is an investment in people and our American form of government can operate properly only with universal and excellent educational opportunity.

Of course, hardly anyone ever comes out openly and explicitly against making adequate expenditures on education. It is almost always a case of let's think about it longer, or why is there so much waste in education, or why don't the schools teach something other than what they are teaching, or is the discipline too difficult or too easy, or are we sure we really need to make this expenditure, or can we get by one more year, or let's do it next year or the year after, or let someone else do it, or is something else more urgent at the moment?

We shall encounter something like this as we move in the next 20 years to secure higher quality in educational opportunity. Therefore, in my judgment, to enlist and inform public support is a duty of the teaching profession. This duty is second only to the duty of providing instruction. In the next 20 years, our local, state, and national organizations should be working very hard on that job. We can show the public that new levels and new solutions for the financing of better schools are imperatively demanded by new conditions and readily permitted by new levels of national productivity. Only a massive effort to advance the level of school support in the states, in the localities, and in the nation can possibly meet the accumulated educational shortages from the past and put education of high excellence within the reach of every young American today.

The accomplishments in quality I have forecast for education in the future are not inevitable. But they are possible. •

We Have Done Far Less Than We Could

Meeting the Challenge of the Gifted

RALPH W. TYLER

In The Elementary School Journal

THE continued development of our society is increasingly dependent on new knowledge obtained through research and on a very high level of skill in such areas as invention, administration, health services, education, and the arts. Thus it becomes quite clear that the greatest threat to the continuation of modern civilization is the neglect of the human potential. Failure to identify individuals with talent, to motivate them to develop their abilities, and to provide the education that they require would result in the most serious damage society could suffer.

In the past, discussions of the education of the gifted have considered the problem primarily from the point of view of the gifted individual and his rights in a democratic society. But today the greatly increased interest shown in the education of gifted children and youth derives more from realization of society's need for developed talent than from our concern for opportunities for the individual.

As we have become more deeply concerned with the conservation of human talents for the good of all, it has become clear that a chief problem in this country is meeting the challenge of the gifted—providing for the continuing and full development of the gifted person from early years all the way through college.

Ralph W. Tyler is Director, Center for Advanced Study in the Behavioral Sciences, Stanford, California. Reported from The Elementary School Journal, *LVIII (November 1957), 75–82.*

Many of our gifted young people never reach a fraction of their potential. The best-known statistic on this point is the fact that only about half of the top quarter of our graduating high-school students go on to college. There are other similar indications of our failure to develop adequately our gifted children and youth. In many homes and in some elementary schools, curiosity and questioning by children are deemed impudent, embarrassing to adults, or at least distracting. The child who reads faster and gets his lesson sooner than do his classmates is often considered a nuisance by his teacher. Providing special materials for such a child takes too much time, and most of us are uncertain about what to provide.

Not only do adults often discourage giftedness, but other children and youth are inclined to treat the gifted scornfully. He may be called a "sissy" or an "apple-polisher" if he performs well on

the tasks set by the teacher. To make the situation more difficult, the general attitude of many communities is unfavorable to giftedness in the intellectual and aesthetic spheres. The mass media of communication—newspapers, magazines, and radio—rarely present gifted children or youth in an appealing role unless, like Mozart or Franklin, they lived long ago.

THREE CHIEF EMPHASES

Conservation of the talents of our gifted children, who typically achieve only a fraction of their potential, is not an easy task. What is required is a comprehensive attack involving three chief emphases.

The first is a continuing program for identifying gifted children and youth, in which teachers, counselors, and leaders of out-of-school youth-serving agencies are actively involved. Such a program not only will use tests periodically but will also include the observations of school people and leaders of other youth groups who have become conscious of the many indications of giftedness (unusual performance in school and out, unusually high interests in one or more fields, unusual concentration of attention and effort, and so on.) The tests used will include exercises requiring verbal facility, mathematical skills, and understanding of social and scientific phenomena; and there will also be opportunities for young people to demonstrate artistic, literary, and musical performance as well as skills in crafts and social leadership. These opportunities for demonstrations of abilities need to be provided periodically because no single survey provides a chance to identify all the "late bloomers."

Such a procedure for identifying gifted children is best carried on as part of a community-wide program. This means the development of a conscious community interest in children, especially exceptional children. The organization of a "community youth commission" with wide representation facilitates the mobilization of leading parents and laymen as well as school people. A wide, community attack requires the development of leadership-training opportunities for teachers, counselors, and volunteer leaders. Short courses, or other training experiences, can help to develop an understanding of the ways in which children grow and develop, the ways in which exceptional abilities and interests may be expressed, and the means for identifying unusual performance, interest, and aptitudes.

The second emphasis in a comprehensive attack is placed on encouraging the gifted. The all too frequent discouraging of gifted children can be changed to constructive encouragement in the home, in the school, and in the wider community. Parents can learn to encourage curiosity and to provide opportunities for children to have contact with art, literature, and music, encourage their early efforts, and reward with approval and appreciation their achievements.

In similar fashion, school and

youth organizations can give encouragement to intellectual curiosity, to aesthetic and practical interests, and to original and outstanding achievements. Appreciation for these exceptional interests, efforts, and accomplishments can become spontaneous when we rid ourselves of our love of conformity, of our fear of confusion and variety in children's behavior, and of our interest in answers rather than in questions and in efforts to solve problems.

The ideals represented by the inquiring mind, by active efforts to attack new problems, by the search for valid expression of feeling, and by the development of high craftsmanship in all fields are ideals that, when sincerely cherished by adults, can be communicated to young people. Hence the development of community interest and encouragement of gifted children has great effect on the goals, the interests, and the efforts of children.

PROGRAM FOR THE GIFTED

The third emphasis required in a comprehensive attack is a well developed program of educational opportunities and experiences for the gifted. In their early years the home is the place where educational opportunities and experiences can facilitate or hinder the development of gifted children. Parents need to provide the experiences which arouse curiosity and interest and to which the children can respond actively and creatively. Materials are important—books, simple tools, musical instruments, pictures, chalk, paints, and the like. Opportunities for observing animals, plants, and other phenomena are valuable.

The home continues to carry on an important role after children enter school, but in the middle years of childhood the home's role in education is more a supplementary and complementary one. As children grow older, the youth-serving agencies represent another potential for the development of the gifted. The Scouts, the Four-H Clubs, and other out-of-school organizations can provide motivation and rewards for high achievement.

At the college level, the bull sessions, the clubs and other student organizations, the hobby rooms, the studios, and the musical groups represent potential areas for the educational development of many gifted youth.

The potential does not automatically become actuality. These areas, too, require leaders who are interested in the problem and who are familiar with kinds of educational experiences which really challenge gifted youth.

SCHOOL'S RESPONSIBILITY

The major responsibility for providing educational opportunities for the gifted rests with schools and colleges. What we have done to meet this responsibility is far less than we could have done. I suspect that a major factor has been our easy acceptance of the formula, "The best way to provide for the education of the gifted is through en-

richment of the curriculum in regular classes," while at the same time we have not really provided such enrichment.

Much is being said about methods through which the gifted can be better educated. And certain methods are being used—to a degree. But an effective program does not rest on the assumed efficacy of some formula, such as enrichment or ability grouping. It provides for identifying the relevant abilities and interests of the students in each class. It draws on a variety of problems which students attack, some problems representing a much higher level of understanding, thinking, or skill than others. It allows students to work at rates which are appropriate for them. It encourages students to do independent work. It makes possible the "skipping" of things which students have already learned.

Most importantly, the motives and the rewards emphasize the challenge of doing difficult things, the fun of working to capacity, the satisfaction of doing a superior job, the enjoyment to be found in using one's skills, be they intellectual, aesthetic, or practical. To provide for the gifted, each school needs to plan and work out an educational program in terms that it can carry on, and not try to take a ready-made device used elsewhere.

FIVE CONSIDERATIONS

As we attempt to meet the challenge of the gifted, let us consider five points: (1) The full development of gifted children and youth is of great importance today both in providing for individual opportunity and in meeting the increasing needs of our society for talented persons in many areas of life. (2) Giftedness is not something one is born with, which will develop on its own. Giftedness is a product of internal factors in the individual and an external environment which stimulates, motivates, and provides opportunities for development. (3) Because giftedness is partly a product of stimulation and opportunity for development, the identification of gifted persons is a continuous process, going hand in hand with encouragement and with educational opportunities. (4) Educational programs for the gifted need to be flexible; to challenge the student in the sense of involving him in tasks which are meaningful, difficult, and yet possible; to permit individual, independent work; to permit students to move in and out of the program as late and early bloomers are identified; and to give recognition and rewards for high achievements obtained in a variety of areas. (5) The curriculum needs to be clearly seen in terms of its major goals—the development of basic understanding, intellectual abilities, social and aesthetic sensitivities and skills, and the like—so that the development of gifted students will be guided by the ends in view rather than by some formal procedure or device. •

Not an "Either-Or" Issue

How about Separate Classes for Gifted Children?

RUTH STRANG

In Grade Teacher

AT present there is keen interest in the answer to the question of how to educate the gifted. Administrators are asking, "How can we *find out* what is the best way to make provision for the gifted?"

Various degrees of separation have been suggested for the gifted.

A special library reading-discussion program for good readers and intellectually gifted children in the sixth grade has been successful in Long Beach, California. Or a period together with a special teacher is being used. While retarded readers are having their special instruction, gifted children in the class meet with a special teacher to engage in activities that are more intellectually stimulating than those offered to them in the ordinary class. Sometimes an extra subject is added.

A half day in a special class brings together bright children in the Major Work Classes in Cleveland. This is a plan which has been standing the tests of time and evaluation for almost 25 years. These children go on excursions, read and discuss subjects of current interest, and do many kinds of creative work. This is an enriched, rather than an accelerated, program. The rest of the day they spend with the heterogeneous group in regular school activities.

Ruth Strang is Professor of Education, Teachers College, Columbia University, New York City. *Reported from* Grade Teacher, *LXXV (November 1957), 18–19.*

In a large elementary school there are often enough gifted children in a grade to warrant forming a special section. But such a special group is soon identified by both students and parents. In one school a youngster said, "Our class is divided into the Reds, Whites, and Blues, but they might just as well call us Fruits, Vegetables, and Nuts." In this kind of system administrators also have the problem of dealing with parents who insist that their children be placed in the special class regardless of their real ability.

There are a few special schools for the gifted. One of these is the Hunter College Elementary School in New York City . Here an enriched school experience is given to children from all over the city who score high on an individual intelligence test.

The alternative to any of these programs for teaching gifted children in separate groups is to make provision for them in regular classes. This procedure seems to be gaining favor. If it is to succeed,

two conditions are essential: (1) there must be creative teachers who are skilled in the individualizing of instruction and (2) there must be materials and equipment appropriate to a wide range of interests and abilities.

Under the most favorable conditions, teachers have been able to meet the needs of gifted children in heterogeneous classes. Such teachers have the attitude expressed by a young rural teacher who was asked to list the gifted children in her class. "All my children are gifted," she said. She tried to provide for each child the experiences he needed. How can this be done?

First, there are group experiences in which the entire class shares. Among these are receiving instruction in a new area such as long division, which all the children need to master; listening to a story that none of them has heard before; learning a new song or dance.

Second, there are small group experiences of the project type in which the gifted may do much of the "research" reading and may have opportunities to write plays and poems.

Third, there are opportunities for a small group of gifted children to do an experiment, write a report on a question not answered in class, or serve as an editorial board for a class newspaper.

Fourth, there are many individual activities in which the gifted child may engage—tutoring other children, serving as teacher in presenting a topic on which he has special knowledge, reading widely, carrying out individual projects of all kinds.

These children will think of things to do themselves. The teacher does not always have to suggest the activities, though he will try to see to it that each child undertakes projects that have both social and intellectual values. He will guard against wasting the time of gifted pupils with unnecessary instruction, drill, and review; boring them with dull books, making them wait while slower pupils catch up; singling them out and making them feel conspicuous.

Actually, this is not an "either-or" issue. More than half of the schools in our country are too small to have special sections for gifted children of a certain grade. However, some small schools that have a high percentage of intellectually gifted students may place children from several grade levels in one group for instruction in that extra subject or for enrichment of the regular work of the grade.

Some individualization of instruction is necessary in any group. The question really is: How great a diversity of interests and abilities can a teacher handle under present school conditions? If the gifted can meet for part of the day in separate groups with special teachers and appropriate materials of instruction, they will have the stimulation of their peers and will not "languish in idleness" while their regular teacher is meeting the needs of the other children. •

Elementary School Is Not a Canning Factory

Improving Instruction Is Your Business

FREDERICK M. RAUBINGER

In The National Elementary Principal

THE public elementary school has been defined by some sociologists as the most representative sociological unit in American community structure. In no other place can parents and children from every walk of life, and of every faith, race, or background, meet and mingle so freely. It is built for all the children of all the people and provides the most important medium by which the aims of our democratic society can be realized.

It may well be said that the elementary school principal is probably in the best position of any of the administrative staff of our entire school system to influence the instructional program directly. Opportunities for instructional leadership at this level are indeed abundant. But difficulties also are present. Most schools are pressed by ever-increasing enrolments, accompanying shortages of space for classroom activities and auxiliary services, and an unprecedented turnover in staff. As never before, the principal must assume a position of educational leadership among his faculty and provide the day-to-day guidance needed by the inexperienced or the inadequately prepared teacher. This means that the principal must give priority to his responsibilities as supervisor and adviser to his teachers.

Frederick M. Raubinger is the New Jersey State Commissioner of Education. Reported from The National Elementary Principal, *XXXVII (October 1957), 29–32.*

In addition, in these days when many forces are being brought to bear on the schools, the principal must have a clear conception of what the schools are for and how the purposes of the schools may be achieved. He must be a thorough student of education, prepared to speak with authority on questions of elementary education. Otherwise, his school will be torn by conflicting pressures which will make it difficult for him and his staff to develop an intelligent, coordinated point of view and program.

I would like to mention four influences or trends concerning which I think leaders in the elementary schools should be thoughtful and about which they should form judgments. I might call the first "education by foundation." With large sums at its disposal, a foundation may set about to bring its influence to bear on the schools. We have, for example, been treated to premature conclusions concerning such things as ways to relieve the shortage of teachers by television and by teacher aids. Professional edu-

cators have the responsibility to assess foundation activities for what they are worth, measuring them against their own experience and convictions, and taking a position on the basis of their own professional judgment—and so to inform their patrons and the public.

I might refer also to "education by automation," by which I mean the increasing use of objective measuring devices to sort, grade, classify, and predict the future of the children in our schools. We are approaching a condition where test data fed into an IBM machine reduce young persons to the status of punch cards. Tests used properly, which is to say as aids to teaching and as one additional basis of judgment, have high value. But when undue emphasis is placed on test results, and when these results become crucial to the hopes and aspirations of pupils and parents, it is only a step to a position where testing determines the curriculum. Teachers will teach for what the tests test or for what they think they test. Unless we are alert, this possibility is not so remote as you may think.

"Education by acceleration," a third influence, is in some degree related to the foregoing. If you can sort and classify with what you assume to be a high degree of accuracy, then you can speed up the education of those who seem to be fast learners and hurry them on their way. Like so many current proposals, acceleration is not new. But it has now been invested with an air of urgency, vaguely connected with shortage of manpower, the need for leaders in science and industry, and a concern for the gifted, which, like other deep concerns the schools have had for generations, is now presented as something newly discovered.

And then there is "education by separation." Separate the mentally retarded; separate the physically handicapped; place the emotionally disturbed in classes with those similarly unstable; skim off the cream of the gifted and put them in special groups or special schools, the fast learner with the brilliant, so that we may thus train our future "leaders." This leaves only the unexceptional (which after all is most of us, I suppose). Being unexceptional, we presumably do not need anything special, and may not matter much one way or another.

TIME TO SPEAK OUT

I have touched on these influences or trends as a preface to the statement that in my judgment the time has come for leaders in elementary education to take a position; to declare themselves concerning the purposes of the elementary schools; to speak out for the rights of children; to expose the fancies and fallacies where they exist. By inference, you may correctly conclude that to me many of the proposals being made and the attempts to change the direction of thinking about our schools are not in the best interests of the children of

this country nor of their proper education. There is, to me, an air of unreality about many current proposals.

We do have our work cut out for us these days and there are problems to face. We have much to do and a way to go before we have enough schools of the kind we should like to have. But let me ask the principal who wishes to be an educational leader to restudy the 1955 Report of the White House Conference. He will find there statements concerning the ideals of American schools.

Extending these principles to our own elementary schools we can say with conviction that the elementary school is not a preparatory school for the high school; not a hothouse for forcing growth; not a race course where the prize is to the swiftest and the devil take the hindermost; not a canning factory where a child's mind moves along a conveyer belt to be filled, sealed, graded, and passed on to the next operation.

I think we can also believe with assurance the following:

1. A child's best hope of becoming an effective adult lies in having experiences which have meaning and use for him now. Neither growth nor real learning can be forced. Pressure to accelerate learning beyond a child's readiness retards learning.

2. A child brings all of himself to school. He needs a balanced program which includes zestful play as well as work which has meaning to him. He needs rest, and he needs creative ways to express his feelings and lift his life above dead level. He needs an emotional climate which accents friendliness, affection, support, and success—and is free of fear, coldness, verbal cruelty, and overwhelming failure. He needs to feel he "belongs" at school.

3. A person learns best through active experiencing. This involves participation in planning and evaluating, with study directed toward solving real problems. A child should have active experience in democratic living in his school.

4. Individual differences in the classroom should be viewed not as a necessary evil but as a source of strength and richness—as they are, in fact, in the community and in the nation.

5. A child is really learning when he is learning to act, think, feel, and behave in an increasingly mature way. The ability to underline the right word in a workbook or respond with the right definition is not in itself a sign of good learning; it may be nothing more than sterile verbalizing.

6. Our responsibility as administrators in public education is to every child of every parent. •

THEY'RE always saying that a man has lost his head—never that he's found it.—Frank Miles in *Midland Schools.*

Are We in a Rut?

Shall We Change the School Calendar?

In National Parent-Teacher

Reported from National Parent-Teacher, *LII (October 1957), 12–14, 35.*

IT is always difficult to get out of the rut. To do so requires ingenuity, persistence, and perhaps daring. It certainly requires one of the hardest of all human tasks—to think along new lines. But we have an educational crisis in America, one that is sufficiently acute to require that we get out of educational ruts if they exist.

We are all familiar with the form and the background of this crisis. Many of our schools are overcrowded. They are understaffed. How can this situation be resolved? The conviction is rising that we must make the best possible use of the school facilities and the qualified school staffs we now have. What can and should be done to assure that we make full, effective, sound, and beneficial use of our school buildings and personnel?

Three proposals have become increasingly prominent in discussions of this question. Though essentially different at several points, they are based on a common assumption: that it is wasteful to use the school staff and plant for only nine months a year.

The least sweeping plan of the three is simply to add a summer session, with attendance optional, to the regular school year. The second proposal calls for regular classes all year 'round. Students would be in attendance for three of four quarters on a staggered basis so that in each quarter a fourth of the students would be on vacation and three-quarters of them at schoool

Under the third proposal, also, the schools would be organized on a year-round, four-quarter basis, but pupils would be required to attend all four quarters. With time out for short vacations, each boy and girl would be in school for 10 and a half or 11 months in all. This scheme could be varied to make attendance in the fourth quarter optional, thus permitting students to speed their education if they wish.

Schools in several cities have had experience with summer sessions. Normally attendance is voluntary and tuition is usually required. These sessions provide year-round employment for part of the faculty and avoid wasting the school plant during vacation. Clearly, summer sessions have advantages. They provide an economical means of giving remedial courses, acceleration courses, enrichment programs, and the like. If a large number of students attend summer courses that accelerate their progress through

school, the sessions will, in the long run, reduce total enrolment. On the other hand, the optional, extra summer school system is not in itself a means of handling larger school enrolments or of accomplishing economies. Indeed, the plan means more expense, not less. And it banishes few problems in the city or town facing acute classroom and teacher shortages.

STAGGERED ATTENDANCE

The second proposal—to shift to a 12-month four-quarter school year, with attendance staggered so that each student attends three of the four quarters—increases the capacity of a school building by one fourth. One teacher, working the year around except for a vacation the same length as that of most business and professional people, can teach about a fourth more students.

Our schools have already had some experience with this plan. The evidence available from past experiments is not decisive. Advantages have been noted, but drawbacks, also. Among the latter cited when the plan was abandoned were the difficulty in carrying on school repairs, painting, and maintenance work; frequent changes of teachers; the impossibility of keeping groups of pupils intact in smaller schools; waste of pupils' time at the end of one quarter and the beginning of the next; undesirable vacation times for many pupils; and a much heavier administrative and supervisory load.

In the end it is the parents who will decide whether a round-the-calendar school program is to be launched. Disruptions of family vacations may be serious, but children's education is basic. *If* the year-round staggered plan is feasible from the standpoint of family life and *if* it can give children a better education than they could otherwise receive, parents are not likely to prevent its adoption.

NONSTAGGERING PLAN

In the other plan of the year-round, four-quarter basis school, no staggering is involved. Each child would go to school when every other child did. All would have the same vacation period. With time off for brief Christmas and spring vacations and with longer holidays at the beginning or end of summer, the school year might include, in all, 10 and a half or 11 months.

The arrangement would not reduce the number of pupils in any given grade. It would accelerate the progress of all children, so that in a few years enrolments would be lower than if the present school year were to continue. Pressures on teaching staffs and physical plant would decrease accordingly. The reduction in time would be considerable. A pupil would go through the primary grades in six instead of eight years, and through high school in three instead of four.

Such year-round attendance commends itself on two grounds, particularly, over the staggered plan. First, it would keep all pupils on an

equal footing as to vacation periods. It would retain natural groupings of children—in classrooms, in families, and on neighborhood playgrounds. It would relieve school authorities of difficult decisions as to which group should have its vacation in the favored summer months, which in the fall, winter, or spring.

Second, it would enable students to get more education in a given span of years than is now possible or would be possible under the staggered program. It would permit students who go on to college to complete their preparation for entering productive and remunerative work earlier. For many young people who would like to go on to postgraduate university or professional school, shortening college preparation by three years might be a large factor.

AUTHORITIES DIFFER

Some authorities will contend that four quarters of schooling a year would press the pupils too much, that it might discourage them, and that acceleration could weaken the quality of education. Other authorities will differ. They may assert that besides accelerating education, extension of the school year would increase opportunity for counseling services and individual attention to meet all the children's needs.

On one difficulty, however, most people would agree: Unless the four-quarter plan is widely adopted, the young people who go through school under the plan and graduate from high school at 14 to 16 years of age instead of 17 or 18 will be out of their age group in college.

There has been some experience in America with year-round, four-quarter school organization, but in each case attendance in a fourth quarter has been optional. Thus these experiments do not have a decisive bearing on the desirability of a regular round-the-calendar system. It is worth noting, however, that in cities where the optional plan was tried there was wide acceptance when it was in effect. In one city year-round enrolment ran as high as 75 percent of total enrolment.

Certainly some such system—staggered or not staggered—is well worth trying. Probably it presents too many problems to permit its adoption on a nation-wide basis. But should it not be tested more widely? The question deserves searching consideration and debate.

We may find that the current, standard school year, in which the school plant, the school staff, and the school facilities cease functioning for the summer, best meets our needs. If so, let's make sure. Let's not close our schools in summer just because it's the custom. If consideration and experiment convince us that we are in a rut, we can get out of it. If, instead, we find that we have solid reasons for keeping the same school year that is now standard, we can still consider means for using our school plant and staff more extensively for constructive optional summer programs. •

Nonteaching Duties Reduce Effectiveness of Instruction in Secondary Schools

LEO E. BUEHRING

In The Nation's Schools

AN investigation known as the Study for Better Utilization of Teacher Competencies in the Secondary School is being conducted during 1957–58 under the sponsorship of Central Michigan College at Mount Pleasant. Financial assistance is being provided by the Fund for the Advancement of Education, which aided previously in a preliminary study appraising concepts basic to present teacher use.

A specific purpose of the preliminary study (1955–57) was to examine the possibilities of extending into the secondary schools the teacher-aide plan that has been developed in the elementary schools. To achieve these goals, two approaches were used: job analysis and time study. Some observations on facts learned in the preliminary study may be of interest at this time.

The *job analysis* sample comprised 62 schools of all sizes, divided into four classifications used by the Michigan High-School Athletic Association for interscholastic activities. The *time study* involved 212 teachers from 18 schools in 13 Michigan school systems.

Sixty-one activities of high-school teachers and their explicit definition were identified and defined. These extended all the way from "directed activities," "question and answer," "lecture," and the like, to such matters as "collecting funds," or "explaining grades." The time study portion of the study was made by staff members with teaching experience who timed the high-school teachers' various activities with a stop watch.

Leo E. Buehring is Feature Editor, The Nation's Schools. *Reported from* The Nation's Schools, *LX (November 1957), 76–77.*

The average length of the school day for high-school teachers included in this study was approximately six and a third hours, exclusive of lunch periods and before-school and after-school time. The average reported time spent by teachers on school activities outside of school was 13½ hours a week, of which approximately one and a third hours was compensated for by extra remuneration. The teachers' total work week averaged slightly more than 45 hours.

Many of the teachers' in-school activities consumed only small amounts of time, the fragmentary nature of their work resulting from the all-encompassing nature of their job, which today requires the teacher to provide a wide range of

services to students. It was shown that one-fifth of the teacher's day is occupied with directed activities —the teacher in a passive role or serving as a potential resource person. Eight other activities each consume from 3 to 8 percent of the school day. The remaining 41.8 percent is split up among 52 activities, any one of which accounts for less than 3 percent.

Although the measuring of time utilization in the early portion of this study was concise and objective, in the final analysis the results of the tests were considered inadequate, because the duration of overt teacher activities from an external frame of reference lacked complete relevance to the purposes of the study. For this reason there was added to the statistical complications a new dimension of observation, namely, "competency level" or "training required." Inclusion of this factor, the staff believes, made the data relevant to the hypothesis that not all the day is devoted to activities requiring professional training.

In order to determine the percentage of the time high-school teachers spend in activities requiring different levels of training, the 61 activities were grouped under three categories: professional, technical-clerical, and miscellaneous. In general, classified as "professional" were those activities which require judgment on the part of the teacher and which draw on his professional background and experience. Activities that were primarily technical or clerical in nature were included in the "technical-clerical" category. Residual activities were placed under "miscellaneous."

In some instances certain activities listed in the original analysis were subdivided for greater accuracy in the assignment of the teacher's time. For example, checking papers is an activity that ranges widely in the amount of professional judgment and training required. When objective keys were used for checking, the activity was grouped under "clerical." If the teacher's judgment was used, the work was grouped under "professional."

The preliminary findings indicated that more than one-third (22 percent and 13 percent, respectively) of the school day is spent by the high-school teachers on technical-clerical and miscellaneous tasks, while only two-thirds of the day (65 percent) is devoted to duties requiring "professional" competencies.

Since time lapse alone was an insufficient measure for answering all the questions that came up, *observations* made by staff members as they timed teachers were included as a dimension of the study.

CONCLUSIONS REACHED

Among the conclusions reached were the following: Insufficient time is provided secondary-school teachers within the school day for lesson preparation; accordingly, teachers do not devote sufficient attention to lesson planning. They

spend only about three hours and 10 minutes a week in preparing for classroom activities on the average. Lesson planning is hampered, too, by a lack of materials and equipment. If the number of peripheral responsibilities of a technical-clerical nature can be reduced, teachers will have more time for instructive work.

Informal observations and theoretical considerations of the learning process formed the basis for the following further suggestions for increasing teacher competencies.

The concept of the teacher as a mediator has limited the transmission of messages to one at a time. There is need for a new analysis of teacher and student roles. There is a need especially to determine the kinds of learning students can achieve *by themselves,* as well as a need to ascertain the things students learn helping one another.

So long as the teacher considers audio-visual presentations merely as supplemental aids to his classroom work, so long will he hesitate to allow students to learn by themselves —as individuals or in small groups —from "stored teaching." Yet use of the latter, says the study report, may gain for the teacher additional time to serve as helper and guide to the student, rather than as a custodian or "presentor of information." An understanding of the fact that adequate materials and equipment for teacher experimentation are an economy, rather than an expense, cannot be postponed if we are to systematize education through better use of both human and mechanical potentials, the report concludes. •

What Teachers Dislike about Teaching

A SURVEY of 260 teachers in selected schools in Iowa and Missouri on the likes and dislikes of various duty categories showed the following results in regard to disagreeable tasks: The most disagreeable task was police-type supervisory duties, such as hall duty, study-hall duty, etc.—more than 52 percent of the teachers listing this as one of the five duties they dislike doing. Thirty-eight percent listed extraclass duties such as athletic activities or music contests. (It is interesting to note that 90 percent of the high-school teachers included this category.) A total of 37 percent listed routine clerical work as disagreeable, 29 percent listed janitorial or custodial duties, and 27 percent listed attending PTA and participating in other community affairs. Preparing, administering, and checking tests was disagreeable to 21 percent of the teachers.—Wray D. Silvey and Herbert M. Silvey in *High School Journal.*

A Look into the Educator's Crystal Ball

A Probable Image of the Future

S. E. Torsten Lund

In Educational Leadership

S. E. Torsten Lund is Associate Professor of Education, University of California, Berkeley. Reported from Educational Leadership, *XV (October 1957), 7–13.*

As Margaret Mead has pointed out, in *School in American Culture,* many teachers reflect a world which no longer really exists, while their pupils will live their adult lives in a world greatly differing from even the present one. Teachers dare not live in the past. They are the persons in our culture who, while constantly striving to understand the present, ought also to be studying the most probable images of the future.

As we view the world of the future, we must start with some assumptions, the most important being absence of large scale nuclear and/or biological warfare, the continuance of the constantly accelerating pace of change brought about by large scale application of science and the resulting technology; the rapid spread of technology and industrialization to all parts of the world; and a continuation of efforts to build a functioning worldwide organization.

Several years ago, in 1954, the writer sketched man's increasing ability to transform his environment by the application of science. ["Technology — Threat to Freedom" in *Education for American Freedom,* published by the Association for Supervision and Curriculum Development.] Illustrative examples were included; some rather imminent developments were included; a possible limitation set by available resources was indicated; and the inherent logic of technology was pointed out as a real threat to man's individual freedom. In general, developments during the intervening short time span have shown the predictions to be conservative.

It is becoming increasingly difficult for anyone to understand the complexity of our world. Technology goes on with an ever increasing rate of development, demanding such increasing specialization that it already has reached the stage where even the specialists find it difficult to communicate with each other. Yet more than ever before we need to know how this technology is going to affect us all. We desperately need great synthesizers who can translate our technology and its probable social consequences into language we can all understand.

We see some attempts to break down barriers to communication. For us, as teachers, an exciting

example is the recent symposium of scholars reported in *Man's Role in Changing the Face of the Earth,* published by the University of Chicago Press. And, after examining other publications which deal with the future, the writer of this article suggests that teacher-readers embark on a study program to inform themselves about the world their pupils will live in. The following thumbnail sketch may whet your appetite.

ACCELERATION OF CHANGE

The most impressive fact in such reading as suggested is the documentation of the *constantly increasing rate* at which change takes place. In fact, the symbol for the 20th Century might well be an exponential curve, with man zooming up the steeply ascending portion of that curve. When plotted, such items as human population growth, production, consumption of coal, oil, gas, various metals, and water all tend to assume the shape of a curve which approximates that of growth of invested principal when compound interest is applied. Even a cursory examination of such a curve suggests that long time continuation along the present dizzy inclines is improbable.

Most writers on the future assume that rapid population growth will continue for some time and, in turn, they foresee many problems. Continual urbanization is foreseen as the only means by which the vast number of future human beings can be kept alive on the basis of any acceptable human standard. This also means a constantly increasing rate of "organization" and an accompanying decrease in individual freedom. It is obvious that enormously complex problems of circulation must be solved, such as those involving water, food, wastes, and the transportation of goods and people.

In every discussion of the future, as one problem after another is raised and possible solutions suggested, two items always rank top priority—first, that of necessary materials, such as metals, coal, oil, wood, fiber, and water. All over the world, the consumption of materials increases geometrically. Hence we know we are facing a growing materials shortage. Incidentally, the glib promise of synthetic substitutes is questionable, since, at present, the most important synthetics have their origin in such materials as wood, coal, or for the most part, petroleum.

A second top priority is that of energy. As various writers consider possible ways out of the impending materials shortage and point to new or different sources, there is always the assumption of sufficient energy to accomplish the preparation. Of all growth rates, during recent decades, that of energy consumption is among the steepest in its increases. In recent history, man has turned to fossil fuels, first coal and later oil and gas, to energize his many operations. Now almost

all authorities agree that the end of our petroleum reserves is in sight. All writers assume that atomic energy will be called on to carry an increasing share of energy loads, even though many grave technical difficulties remain to be solved, not the least being that of disposal of the "hot" ash.

Every possible source of future energy is being carefully studied and reevaluated, including wind, tides, solar energy (both direct and indirect), hydro power, etc. At present, there is a faint hope that nuclear fusion (related to that powering the hydrogen bomb) *may* be brought under control to save an energy-hungry world. Nevertheless, it seems reasonable to assume that, in the U. S., our present energy-squandering way of life will shortly have to be revised to a more Spartan level.

In this country at least we also face an increasing shortage of water. Here again we have an example of the exponential curve, such increased consumption rates are proportionately much greater than our population increase would suggest. Even in water-surplus sections of the U.S., there is a growing concern for adequate supplies of water suitable as to purity and temperature, and over water we will fight some of our most bitter political battles — as is already evident in the Far West. The desalination of ocean waters and purification of brackish water, the recycling of water, use of reclaimed water from sewage, and the transportation of water over longer and longer distances, all will be brought to bear on this problem, but always accompanied by greatly increased cost.

Less attention has been given the growing contamination of our atmosphere, the only source of air, which is necessary for all life. It is worth noting that the atmosphere is one natural resource which cannot be the monopoly of any one nation but belongs to *all* equally. There is, therefore, a deeply moral question involved when our industrial operations, our urban centers, and the world's military establishments, convert the atmosphere into a gigantic sewer by the injection of untreated noxious gases, fumes, smoke, and fissionable atomic debris.

There is a growing realization that a highly interrelated and interdependent industrial society is peculiarly vulnerable to disruption —as contrasted with the simpler, more selfsufficient, nonindustrial societies, for there are many points at which a blockage can bring the whole system to a standstill. As pointed out by many thinkers, this property of our industrial society, almost guarantees that steady growth of organization is an inherent property of industrialization with attendant increase in centralization in our social, political, and economic affairs. The inherent characteristics of a technology-dominated world when extrapolated into the future can provide, as it has in many writings, such as

Richard Gerber's *Utopian Fantasy,* fearsome pictures of a future eventually devoid of individual freedom. There may even be a "point of no return" beyond which such an outcome is inevitable.

It is also obvious that in the future, even more so than is true in the immediate past, man must appreciate his basic dependence on his physical environment, for with all his inventive prowess it still remains true that he cannot, for any length of time, exceed the carrying capacity of his physical environment. Call this conservation-mindedness, or what you will, there is here implied an important ethic, for as Sears says in *Man's Role in Changing the Face of the Earth,* "Whether we consider ethics to be enlightened selfinterest, the greatest good for the greatest number, ultimate good rather than present benefit, or Schweitzer's reverence for life, man's obligation toward environment is equally clear."

MOST CRITICAL FACTOR

Space limitations prohibit any real considerations of the educational implications of this brief picture of the look ahead. However, it is significant that though many of our basic resources appear to be headed toward a short supply, even in the immediate future, it is obvious to anyone reading these various prognostications that the most critical factor of all will be man himself. The real limiting factor is man's capacity to so manage his various enterprises that he can continue to live in human decency and dignity.

As we have noted, change appears, at least in the short run, to parallel an exponential curve. It is therefore the responsibility of man's educational institutions to provide a constantly increasing number of well educated and wise individuals who can understand our complex world, who have a valid ethic which will guide them in choosing future alternatives, and who can successfully communicate their understanding and their guidance to mass man.

It is here we are directly and immediately concerned, for it is through our schools that society must prepare its children, and even its adults, to live in the coming, complex world. Unless we can meet these problems, we may well be "painting ourselves into a corner."

Assuming you have read such imaginative works as Orwell's *1984,* Vonnegut's *Player Piano,* and Huxley's *Brave New World,* I suggest that you browse in some of the following: *The Next Hundred Years,* by Brown, Benner, and Weir; *America's Next Twenty Years,* by Peter Drucker; Richard L. Meiner's *Science and Economic Development — New Patterns of Living; Posthistoric Man,* by Roderick Seidenberg; Olaf W. Stapledon's *First and Last Man; The Human Use of Human Beings* by Norbert Wiener; and *Man's Role in Changing the Face of the Earth,* the symposium referred to earlier. •

Other Jobs Are Complex, Too

Merit Rating

HAROLD B. DUNKEL

In The School Review

MERIT ratings, schemes by which superior teachers would receive higher pay for outstanding performance rather than being held to the levels of rigid salary scales based on training and length of service, have been called "the hottest issue in education today."

Since this topic lies outside my major fields of interest, I have not carefully scrutinized the evidence or attempted to reach an opinion on it. But even at relatively casual reading, the manner in which some of the discussion is carried on is so irritating that I almost despair of being able to reach a judicious conclusion if I undertook to do so. I suspect that the effect on the public has been much the same.

The first bit of behavior which arouses my ire is the weeping over the fate of the child. This approach is blatantly a rhetorical device, intended to befog the issue with the mists of sentiment. To be sure, considerations of the child are ultimately relevant in any educational discussion, since the aim of education is to help students. But as an immediate consideration in this controversy, the child is essentially irrelevant. The prior question is what effect the adoption of merit ratings would have on teachers and teaching. Of course they, in turn, affect the child and the child's education.

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But neither proponents nor opponents of merit rating are actually out to "deprive the child of his right to a sound education."

A second annoying element in these discussions is the number of diatribes on the complexity of the teaching operation and hence the impossibility of assessing merit in any satisfactory way. Authors may take this line because they object, and rightly, to the only too common view of the teacher as a tax-supported baby sitter, who does nothing but keep order and correct a few spelling errors. Certainly teaching is a complicated operation, and quite possibly a large section of the public needs a much better understanding of the complexity of the job than it now has. But discussions of merit ratings seem a poor occasion to convey the proper view of the nature of teachers' duties.

In the first place, many members of the general public who read such discussions are themselves engaged in fairly complex operations. The executive, the entrepreneur, the practitioner of a profession may

be perfectly willing to admit that teaching is a complicated task, but still he will be loath to say that it is enormously more complicated than his own job. All these people are being rated by their clients, patients, patrons, and immediate superiors, and they, in turn, are rating others whom they supervise or direct. As I have heard them state, they become suspicious of assertions that teaching in elementary and secondary school is so complicated that similar judgments are impossible.

A second unpleasant imputation is also likely to be made as a result of our professional jargon. Outsiders have often charged that "pedagogese" is merely an elaborate means of enabling educationists to state platitudes in speciously scientific terminology. We can be fairly certain that, if teachers protest too loud and long about the infinite complexity of teaching, these protestations will be construed in many quarters as merely another attempt to magnify a simple and routine job into an intricate and grandiose operation.

Another reason for avoiding too much stress on complexity is that many people will see that this aspect is obviously only part of the problem. We actually are not wholly at a loss to measure how well a teacher does the particular things he does, even when these fairly specific activities are woven into that complex totality called "teaching." Difficult though the problems of evaluation may be, we have made headway against equal difficulties in education and in other areas. The rock on which many attempts to evaluate teaching have foundered is not merely our inability to measure what a teacher does but also our confusion in deciding on what he ought to do.

The fifth-grade teacher who gets a lot of mathematics taught may not be very good at helping his students to develop greater maturity or to solve their problems with their families and peers. Is he doing an outstanding job of teaching, or is the man who shines at these latter tasks but is less gifted at teaching "math" the better teacher? A great many of us suspect that this sort of uncertainty produces much of the difficulty in assessing teaching. We piously hope for the teacher who does everything well, but in actual life we must usually decide which particular grouping of more narrow competencies we shall reward.

The complexities of teaching will become obvious enough if we undertake to measure effective teaching, whether this evaluation is used in making merit ratings or whether the problem is studied merely as an important problem in its own right. We probably do ourselves a disservice by belaboring the point of complexity at large and in advance. •

EQUAL pay for unequal performance is a vicious perversion of the concept of equality.—John A. Hannah.

Whither Higher Education?

CRANE BRINTON

In The Journal of Higher Education

FIFTY years ago Henry Adams complained in *The Education of Henry Adams* that Harvard had not prepared him for life in the 19th Century. Now Alan Valentine, former president of the University of Rochester, in *Trial Balance: the Education of an American,* makes the same complaint: Swarthmore and a Rhodes Scholarship at Oxford did not prepare him for life in the 20th Century. They both, one guesses, wanted from the world the highest success. In the Anglo-Saxon world, certainly, that kind of success is political and military; intellectual and artistic success falls just short. Both Adams and Mr. Valentine achieved success—but as intellectuals, not as men of action.

Neither Adams nor Mr. Valentine tells us at all clearly just what was wrong with his education; nor does either suggest at all specifically what might be done to make a good education. But they—and many other contemporary commentators—share a sense of crisis, or participation in a really shattering change they cannot understand.

It would be most presumptuous to claim an understanding, a foresight, denied to two such gifted and experienced men. Still we may here examine the subject of higher education with the hope of enlightenment for our own day. Especially in the United States, the whole human situation involved in higher education seems to be changing so radically as to make both Adams' and Mr. Valentine's complaints, just because they are so thoroughly traditional, seem tangential.

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The break in the social structure which has brought about such changes was not a sudden or catastrophic one. Its causes are still by no means wholly understood. But the facts are clear: Throughout the Western world, and most conspicuously in the United States, there were by the end of the 19th Century, after some four or five centuries of material progress, great numbers of young men and women freed from the traditional necessity of working with hands and bodies to produce material things. Proportionately five, 10, and 20 times as many adolescents as earlier were *forced* (the word may here be unduly provocative, but we Americans need to be reminded that society works compulsively) into higher education.

In these four or five centuries it is an equally clear fact that the methods, aims, and especially the curriculum, of *higher* education changed very little. Rousseau, Pestalozzi, Robert Owen, and the others cumulatively did something to alter primary education; the Utilitarians and their like did something to begin formal vocational education. But higher education was still essentially the trivium and quadrivium, the latter refurbished a good deal by the new sciences, the former slightly widened by some attention to the "new" vernacular languages and literatures.

IMMEDIATE CHALLENGE

There had been an astronomical increase not just in the absolute number of students in higher education in the United States, but in their number relative to the total population. We all know the situation: by mid-20th Century it seemed possible that almost every boy and girl up to 18, perhaps to 21 years, would have to undergo some form of higher education. Here the great and, to most of us, sound and appealing American devotion to egalitarian ideals runs up against its toughest immediate challenge.

For it looks very much as though all men were not created equal in respect to their ability to face up to the trivium and quadrivium. Behind the dissatisfaction which Henry Adams and Alan Valentine put in so personal—and essentially misleading—a manner, there lies a real difficulty neither of them really states clearly, though they are both aware of it. Both Adams and Valentine were born gifted members of our intellectual aristocracy. Both, in the 13th or indeed in the 16th Century, would have been successful scholars. But had either in those centuries tried to enter that other aristocracy of the political and the military, had either in those centuries tried to govern men, tried to become active leaders, one guesses each would have failed in the attempt.

EDUCATING THE LED

Our present greatest problem, and in spite of Adams and Valentine, is not one of educating leaders —except, perhaps, in educating them to observe realistically the behavior and the needs of the led; our present problem is educating the many, the led. The facts do seem clear: In accordance with human institutional habits, we have tried—in a sense are still trying—to apply "liberal" higher education to the many instead of just a chosen few. These few were in the past "chosen," on the whole and in spite of anomalies we all recognize, by their own will and ability. The result of the effort to teach the many as if they were the few has failed after half a century. We all recognize this, too, even though we may resist admitting that we do, so far, at least.

We have had to make all sorts of adjustments, most extensively and rapidly since Mr. Valentine first

went to college in 1917. Even at a first-rate liberal-arts college there are some changes: a boy can study economics, perhaps even accounting, and he need not study either Latin or Greek. At a first-rate land-grant university, however, the change is already very great indeed. Abelard or Erasmus or even John Stuart Mill, brought to life today, would find Swarthmore or Amherst, in spite of their strangeness in many ways, basically familiar. Michigan State, even in its Basic College, would seem almost wholly alien to them; indeed, in a sense, the Basic College might seem strangest of all to them, for there they would find their trivium and quadrivium shaped quite anew, studied, in fact, by young men and women they would not recognize as scholars.

"SPECIALIZED EDUCATION"

In sum, then, it would appear that the traditional Western higher education has hitherto been molded to the interests and capacities of a minority, an intellectually privileged group, an aristocracy willing and able to undergo a rigorous discipline, a discipline indeed that might be called with some ambiguity, "unnatural." This amounts to saying that, *in terms of average human capacities and interests,* "liberal education," or "basic education," or "general education" at the college level has been a highly specialized, indeed a professional, form of education. Erasmus—to take him as a type or symbol—is as "narrowly" specialized as a professional athlete, a professional engineer, an expert of any kind.

This conclusion will outrage the feelings of many gifted and experienced educators. It is not, however, meant as a conclusion that educated Americans have nothing in common, that the current movement against exclusively professional training under the guise of higher education is impossible. It is meant simply as a reasonably accurate conclusion from the historical record, a conclusion from which the important inference should be that American higher education is today in the midst of a vast and unpredictable series of changes, changes that really do deserve the overworked epithet, "revolutionary." Because we are undergoing this kind of change, no one can be at all sure of what American higher education will be like once we really do adjust ourselves to the needs of such education for almost every young man and young woman.

THE FUTURE?

It may be that the future will confirm the hopes of the traditional idealist. It may be possible to submit everyone to the study of the best that has been thought and said over the last 3000 years, and have them emerge as liberally educated men and women. It may, to use a word we all understand, be possible to maintain "standards" while educating nine out of 10 substantially as we not so long ago educated one out of 100.

It seems much more likely, however, that out of the present confusion will come a frank recognition that liberal education in the traditional sense is, in fact, "scholarship," that scholars are a very special group (and a very hardy group) who can and should be trained, not in isolation from their fellows, of course, but in a special curriculum. For the rest, the already great variety of alternatives may conceivably even be increased. Much as the tenderminded may regret it, it looks as if the future holds more, not less, of ceramics, physical education, home economics, cultivation of the personality, human relations, hobby culture—you may add your favorite horrors to the list. We may, indeed we must, develop some sort of "common core" for this immensely varied lot of subjects, but just what this core will be is precisely the heart of our present uncertainties—or better, the most difficult and most important part of our great common experiment. No one can be sure how this part of the experiment will come out, but it seems most unlikely that it will come out as universal, classical, liberal education as our fathers knew it.

Should it so come out, we should indeed have made our democracy into a universal aristocracy of the intellect, surely a Utopia most unpleasant to contemplate even in these days of inverted Utopias. Huxley and Orwell imagined nothing more horrible. Let us, then, be grateful for ceramics and even for beauticianry. They are good sound human pursuits in this real world, the varied, fascinating, unruly, and undignified world of democracy. •

The Years Ahead

THE years ahead are certain to be years of great popular interest in higher education. The problems we face and the great difficulties we shall encounter in solving them are certain to keep higher education in the limelight. And this is good. As the colleges and universities become crowded, public interest may take the form of vigorous criticism. But that is all right, too. What the colleges and universities cannot stand in public apathy. It will be better to have the public grinding its teeth about higher education than yawning over it. So long as the public is vitally interested, any institution seriously concerned to upgrade itself will find important opportunities to do so. And by "upgrading itself," I do not mean changing itself into some other kind of institution. I mean equipping itself to meet its own chosen objectives more adequately.—*John W. Gardner,* president of the Carnegie Corporation of New York.

A New Look at the Data Shows That—

Now We're Lagging Only 20 Years

MARGARET BUSHNELL

In The School Executive

SCHOOLS have a reputation for not keeping up with the business and industrial Joneses when it comes to implementing fresh ideas and techniques. We refer to our disinclination to try new practices as the "50-year lag."

But actually, schools are adapting faster today to meet changing needs than ever before. For example: a practice that was introduced in Metropolitan School Study Council schools about 1900 took 50 years to reach 73 percent diffusion. But a practice introduced in MSSC schools in 1930 took only 27 years to reach 73 percent diffusion. This is good news to educators who have long lamented the 50-year lag between invention and diffusion of good educational ideas.

The theory of educational lag was first developed about 20 years ago when Paul Mort and Francis Cornell devised a method for measuring educational adaptability—the ability of a school to adjust to changing times. Walter Cocking is another investigator who was curious about the educational lag. These men concluded that it takes a long time—50 years is not unusual—for an educational invention to *develop* to meet a specified educational need. Once introduced, it takes just as long for it to diffuse to other school systems.

Margaret Bushnell recently served as Editorial Director of the Institute of Administrative Research, Teachers College, Columbia University, New York City. *Reported from* The School Executive, *LXXVII (October 1957), 61–63.*

These early studies have been expanded by David Adler and Harley Allen. Adler dealt with 170 of the member school systems in the Associated Public School System—a nationwide cooperative organization of school systems working together to improve schools—and Allen, with the financially-favored school system members of the Metropolitan School Study Council. The MSSC members are suburban to New York City. These studies have included 33 practices, such as: a room in the elementary school used as a library; pupils studying their own community through trips to factories, offices, newspaper plants, banks, and farms; and an organized guidance program in the elementary school including the services of a psychologist. These later studies—in both APSS and MSSC only served to confirm the earlier findings of this 50-year lag in education.

It has seemed logical to assume that the most recent educational in-

ventions *should* be diffusing more quickly than inventions introduced in earlier years. With new methods of communications, ideas are quickly available to more people. Another factor in the speed-up is the current awareness of this lag problem. My investigation of the subject has shown this assumption to be valid.

The first step in testing this hypothesis was to group the 33 practices used in the Adler and Allen studies by date of introduction. In other words, I broke the composite lines into shorter time units. After grouping the practice by date of introduction, I plotted three lines for the APSS data and three for MSSC data to show rate of diffusion for practices introduced between 1882–1901, between 1912–1921, and between 1922–1941. The graphs resulting clearly show the increase in rate of diffusion for later introductions as against earlier ones. It took 41 years for half of the APSS schools to introduce a practice which had first appeared in one of these schools between 1882–1901. A practice introduced between 1912–1921 took only 32 years to diffuse to half of the schools, and this was cut to 22½ years for practices introduced between 1922–1941. A comparable improvement in the rate of diffusion may be traced in MSSC.

The findings led to a further study to determine the relation of cost to the rate of diffusion. A typical cost item was "operation of a school camp by the school system as part of the regular school program." A noncost item was "records for each child readily accessible to and regularly used by the teacher." It was learned that "early introducers" are just as apt to try a new idea that costs extra as one that does not. But school systems that might be termed "followers" are more apt to diffuse the noncost items.

In MSSC where school systems are financially favored, the cost items diffused significantly faster than noncost items from the start. Nevertheless the graphs showed that all school systems are making some headway in cutting the time lag.

TEMPERED OPTIMISM

On the basis of these findings, then, we can afford to be somewhat optimistic about the adaptability of the public schools. We can say that it probably takes something less than 20 years for a good educational idea to be introduced into half of the public schools today. This is a considerable improvement over the 40 years it used to take to reach 50 percent diffusion.

But there's still a long way to go. School people—teachers in particular—must become aware that sensitivity to needs, willingness to experiment to find new solutions, and conscious effort to promote the use of good educational ideas are essential in reducing the present time lag in education. We must get more used to the habit of exchanging old habits for new ideas. •

Is Correct English Worth the Price?

CARL G. MILLER

In The Clearing House

ONE of my troubles as a teacher of English is to avoid being a marked man. I'm supposed to teach the youth of America something about correct English. I'm hired to teach them how to be more or less grammatical. As an English teacher I'm expected to speak in a model fashion, but do you think I dare to do so? I should say not. That is, I don't dare if I wish to remain just a pleasant fellow among the crowd.

I might be curious over how a friend voted in the election for governor. I might presume to ask him. But do you think I could speak out in bold grammatical fashion and say: "Whom did you vote for?" If I did, my friend probably would look at me askance, wondering what I was trying to do. Was I putting on airs? Then he probably would recall that I was an English teacher and overlook the "affectation." And he would give me a civil answer.

What did he expect me to say? Why he expected me to ask: "Who did you vote for?" That's what everybody says. That's what he says. If anyone says anything else, well, he's an English teacher.

Everyone says: Who did she marry? Who are you going with to the party? Who'd you take to the dance? Who did the board select for an architect? Who are we supposed to believe? They're all incorrect, to be sure. Every *who* should be a *whom.* But who dares to talk like that? As an English teacher, I know what's right. One should use *whom,* which is the objective case form, when the word is the object of a verb, object of a preposition, subject of most infinitives, etc. But who knows such rules? Or rather, who wants to know them? After teaching English for many, many years, I wonder. I am gradually getting several ideas on the subject.

Carl G. Miller is Director of Publications at the Lewis and Clark High School, Spokane, Washington. *Reported from* The Clearing House, *XXXII (November 1957), 135–36.*

One is that the teachers of English throughout the country are not teaching grammar well enough. This I firmly believe. I happen to be a teacher who supervises a high-school newspaper and I still labor under the idea—maybe it's a delusion—that the sentences the kids write for the newspaper should be grammatically correct. Yet I don't find that the students who enroll in my journalism groups know much about grammar. They certainly can't solve the *who* or *whom* problem in easy fashion. As for knowing

something like what is a participial phrase—well, I wish they did.

Another idea I get is that the population is loaded with persons who not only don't know grammar but don't wish to know it. I get the notion, it seems, that what great numbers of people say in great quantities is correct, or should be, or soon will be. According to this principle the pronoun *who* is taking on a new objective case form. It isn't going to be *whom* any more. The dictionary may carry the word, but it will be marked archaic. The accepted objective case will be *who*.

In New York, where there are undoubtedly a great number of smart people, there are some persons who really ought to know when to use *who* or when to use *whom*. One group is the editors. I think probably I could make a blanket statement about *who* and *whom* in their favor. Another group of bright boys is the star radio announcers. But do they always say *whom* when they need an objective case? Take it from me, they don't. They slip up right along. As an English teacher I have the weakness to note such things. But I've learned not to speak of them. If I do, I'm just a marked man, and, away from school, I'd rather not be that conspicuous. It is much more restful not to be.

But it's much more than using *who* and *whom* correctly that gives me trouble in trying not to be a marked man. There are plenty of other cases of grammar. As a teacher of English I should say, "Yes, this is he" or "Yes, this is he talking." Those are correct, but people think them affected. So I dodge the whole issue. I say: "Yes, I must be the man you want." I just change the pronoun to a noun to avoid a label I don't like.

What should we do about correct grammar in this country? The answer isn't clear. Personally, I'm glad I know what's right even though I don't dare to use the correct expression at times, especially in informal talk. I think there's a beauty to the logic of correct grammar. I think we should teach grammar more thoroughly, but evidently we must teach tact along with it. We probably ought to tell our young folks that when in Rome, talk as the Romans talk. This may not mean being ungrammatical but it would mean using the vernacular and, with certain people, avoiding use of conspicuous cases of correct English. We should just say it some other way. •

English — As She Is Wrote (By Students)

• SEVENTH-grader's "quote" from the Declaration of Independence: ". . . Every man should be divided equal."—From *NEA Journal.*

• "SHE heard hoofbeats in the distance, but they were not those of her lover."—From *High Points.*

To Get Education Out of the Red

Higher Salaries for Teachers

JOHN K. NORTON

In NEA Journal

EDUCATION, right in amount and kind, is one of the most productive of enterprises. Two factors determine the productivity of a people: (1) technology—the application of science to production and (2) universal education, adequate in amount and quality. When these exist, a high level of production is achieved. If either or both are absent, low productivity and mere subsistence prevail.

What this boils down to is that a high level of productivity results from capitalizing human resources. In the United States we have had the wisdom to recognize this fact. In theory—and to a degree in practice—we have made education the right of all rather than the privilege of a few.

Even so, only about 50 percent of the economic potential of education has been capitalized. There are 10 million adults who are functionally illiterate in this country. The rejections under Selective Service for preventable physical and educational deficiencies add up to a disgraceful percentage. The report of the Commission on Human Resources and Advanced Training points out that only half of our top 20 percent of talent continue their education beyond high school.

The shortage of highly trained personnel in many callings, including education, is more a shortage of educational programs than a lack of innately qualified persons.

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In the United States, the key word in education today is "shortage"—shortage of teachers, shortage of school buildings and other physical facilities, shortage of educational guidance which would lead more able youth into productive rather than blind-alley occupations, shortage of scholarships to finance the rising costs of college education. Worst of all is the shortage of an education program which will close, rather than widen, the gap between the pressing educational demands of a complex, industrial world power and the kind of education we actually finance.

The overcrowded classroom, the harassed and sometimes partly prepared teacher, the underpaid teacher, and the lack of guidance programs—these are at the bottom of much of the waste of human talent today. These tasks would be corrected in a few years if we would put some real money into education.

In attempting to overcome educational shortages, we apparently are willing to try everything except enough money.

The fully qualified teacher is probably the most productive worker in the United States. He lays the foundation of all progress, economic as well as moral and spiritual. And yet, very little account has been taken of these considerations as they concern teachers' salaries. In 1942, due to war and inflationary factors, the average salary of teachers fell below the average earnings of all persons working for wages or salaries. This relationship has continued in half of the years since 1942.

In short, this rich nation does not look on teaching as a profession which deserves an income even approaching those prevailing in other professions. Rather, it looks on teaching as just another occupation —at least we might so conclude as far as the economic base provided for teaching is concerned.

There are, no doubt, factors other than money income which would help to attract an adequate supply of teachers into the profession. It is doubtful, however, if any of them, or all of them together, would eliminate the shortage of qualified teachers unless appropriate compensation is provided.

There is no shortage of teachers in communities which pay a starting salary appropriate for a beginning member of a profession and which offer top salaries of $8000 to $10,000. There would be no shortage anywhere if all communities offered similar compensation. This would cause an increased percentage of able young people to prepare for teaching, would cause some persons who have left teaching to return to this field, would cause former women teachers whose children have reached high-school and college age to return to teaching, would keep thousands of teachers from transferring to other callings, and would open up other sources of teacher supply.

LAW OUTLAWED?

It is regrettable that some persons who prate so glibly about the law of supply and demand in other situations try to outlaw it when attempting to secure enough competent teachers to instruct the children and youth of this land of ours.

Space does not permit a detailed account of what has happened to the income of the administrative and supervisory personnel of the teaching profession. Suffice it to say that the salaries paid to the administrative and supervisory leaders in education have done an even poorer job of keeping pace with inflation and other factors than have teachers' salaries in general.

We have tried to bridge the gap between the demand and supply of teachers with a series of gadgets and subterfuges. This hasn't worked, and it won't work. Now that we have tried everything else and have failed, the time has come to use some of the income which we have in such abundant supply, and

which we spend with such opulence for public and private purposes of less significance to the general well-being than education. Let's apply the law of supply and demand to the teaching profession and see what happens.

This can be done by a relatively simple formula. Using well known mechanisms of school finance, let us rapidly raise the salaries of all lower paid teachers and increase substantially those of teachers receiving average and above-average salaries. The average increase each year in the real, or buying power, wage of teachers should be not less than 20 percent. Annual increases of this percentage should be continued until the teacher shortage has been eliminated.

Teachers' salaries could then be stabilized at the higher levels required to maintain a fully qualified professional personnel. Adjustment could be made from year to year to take account of changes in cost of living, rising productivity of the economy, and other factors.

There is no question that our economy could readily meet the increased cost involved. In fact, this would do much to capitalize the full economic potential of education. Even though it might double or triple the cost of education, it would cost considerably less than what is now being readily voted for military preparedness. Educational preparedness is no less important to national progress than is military preparedness.

The time is overdue for a policy for paying teachers, as well as for meeting other school costs, which will get education out of the red and give it the place in the current economy which it should occupy. •

Salaries Are Up — But So Are Prices

CITY school salary schedules for teachers for 1957–58 seem to be a jump ahead of the rising cost of living, but they will have to do some fancy stepping to stay that way, according to the National Education Association. The NEA's Research Division, in a recent survey of 414 urban school districts, reported that in most cities salary schedule minimums and maximums have risen about 6 or 7 percent over those of last year. But prices have risen 5.7 percent since August 1955 and 3.6 percent since August 1956, as shown by the Consumers Price Index.

The survey showed that the median beginning salary for teachers with bachelor's degrees in cities over half million population is $4,000—up 6.7 percent from 1956. The corresponding figure for cities of 100,000 to 500,000 is $3,800, up 8.9 percent. For cities of 30,000–100,000, the salary is also $3,800, up 7 percent.

Historical Materials and High-School Science Teaching

LEO E. KLOPFER and FLETCHER G. WATSON

In The Science Teacher

MANY high-school science teachers today are rightly concerned about attaining what are frequently referred to as the "intangible objectives" of science instruction. That our students should attain thoughtful appreciation of science, scientific attitudes, and interests in science are vital objectives for science instruction, which can hardly be argued in the present day. Yet, relatively little thought has been given to how these important objectives may readily be reached by classroom teachers and there have been few instructional materials designed specifically for this purpose.

Certainly, it is inadequate to say hopefully that scientific appreciations, attitudes, and interests will arise spontaneously when students take a course in physics, chemistry, biology, or general science. If we want our students to attain these "intangible" outcomes through our instruction, we must make specific plans to achieve them.

USE OF "CASES"

The use of historical materials can serve as an effective means of achieving these desirable and important outcomes in high-school science teaching. To show their students what the scientific enterprise is all about, a number of high schools now are exploring the use of "cases"—a method adapted from the use of historical materials in general education science courses in colleges.

A "case" involves the critical study of the development of a scientific concept. It can show students how scientists actually go about the complex task of finding new facts, organizing them, and testing hypotheses through experimental confirmation of predictions. Because a "case" is concerned with the *development* of new concepts, it not only involves the final results of the scientific inquiry, but stresses the scientists who were involved, the information available to them, their search for better facts and explanations, and the intellectual and social climate in which they worked. Thus, past scientific accomplishments appear as part of our total intellectual and social history. Em-

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phasis on the development of concept allows transfer of the ideas stressed to current and future scientific efforts.

Surely "cases" are not a complete substitute for personal involvement in creative science, but they can aid by focusing attention on the creative processes and yield insights and approaches profitable in independent research. On his own in the laboratory, the student should recognize how his problems are like those of other inquirers whose decisions may clarify those of the student. The study of history is profitable when it aids us to make wiser decisions about the problems at hand.

The inclusion of material from the history of science in science instruction is now being favored in the secondary schools. The preliminary results of an informal survey of high-school science teachers in various parts of the country indicate that it is current practice for them to use historical materials, often to a large extent.

WIDE DIVERSITY

The replies, however, show a wide diversity in such use—from the telling of anecdotes and stories and the reading of historical descriptions to modified use of the college textbook *Harvard Case Histories on Experimental Science.* Some alternates include the citing of instances of scientific methods in the past, reading parts of/or entire biographies of scientists, suggested readings in the history of science, describing or performing "classical" experiments, and student reports on scientific developments in the past. Some teachers have had their students carry out projects that reconstruct the scientist's attack on a particular problem.

In general the survey reveals that teachers acknowledge the value of historical materials in teaching high-school science and many report that historical material generally "goes over well" with the students.

Historically based textbooks and workbooks now are being used with success and point toward good results in the use of subject matter from the history of science.

NEW MATERIALS

In the past several months, a new series of experimental materials for science teachers has been prepared at the Harvard Graduate School of Education. The series is called *History of Science Cases for High Schools,* and to date, three preliminary cases have been completed. These take their cue from the *Harvard Case Histories on Experimental Science,* but they are, of course, designed for a younger audience, are shorter, and are more complete in themselves than their collegiate predecessors. The first one is "The Sexuality of Plants," the second is "How Far Away Is the Sun?" and the third one takes up "The Discovery of Bromine."

The cases all embody several components. First, there is a narrative outline, which occupies most

of the booklet. This narrative is accompanied by marginal notes and leading questions to point up the various aspects of science illustrated in the story. The marginal notes and questions should be the starting points for class discussion and investigations by individual students or groups. The essential component of a *History of Science Cases,* however, is the working out of actual experiments and problems by the students. Therefore, numerous suggestions for experiments and exercises are included in each case. There is also a short list of related readings for teachers and students.

As developed in this preliminary series, the cases selected offer a critical study of the development of a major scientific idea or concept. For example, in "The Sexuality of Plants" it is pointed out that the notion that certain plants have separated "male and female" parts was known already in a practical way by the ancient Babylonians, but the knowledge did not become a scientific concept until several thousand years later. These facts follow: Nehemiah Grew was the first modern scientist to assert in 1676 that plants reproduce sexually and Rudolph Jacob Camerarius reported in 1694 the decisive observations and experiments. The concept was most firmly established when Carl Linnaeus incorporated it in his "Sexual System of Classification" in 1735. The fascinating development in this case places greatest emphasis on experiment as an essential of scientific method, the byways followed in the growth of an important scientific concept, and the distinction between science and technology.

WHAT IS EMPHASIZED?

In every "case" being prepared emphasis is placed on specific facets of science, such as the following:

1. The methods used by scientists.
2. The knowledge that science is made by men—not by machines or magicians. It follows that scientists are human beings and have human limitations; that they differ in temperament, outlook, emotions, ambition. We also note that scientists have certain *attitudes,* which we call scientific.
3. Science is an international activity; it is not confined to any nation, race, or group.
4. Science must have money to carry on.
5. Science must have free exchange of ideas—in meetings, journals, books, societies.
6. Constantly improved instruments and equipment are needed for progress in science.
7. Scientific activity is not isolated from, but is, to a large degree, the product of the culture in which it exists.
8. Science advances most rapidly when there is controversy.

Such ideas as these, when well understood by our students, may readily lead to the appreciation of, and interest in, science that we are trying to achieve in our science instruction. •

"No Wonder Teaching Is a Tough Job"

Psychological Analysis of the Children in the First Three Grades of School

W. E. BLATZ

In The Educational Record of the Province of Quebec

THE title of this article is presumptuous. It should read: "The Author's Opinion of What Goes on in the Minds of Children between the Ages of Six to Nine Inclusive Which He Has Formed over the Past Thirty Years of Observation, Having Forgotten Completely How He Was Thinking about the World at That Age, and Realizing Fully That the Efforts to Explore the Minds of This Age Group Have Revealed Only What the Observer Interprets in the Light of Adult Thinking."

This title would be too long and too revealing, and the article might not be read. In any case, and under whatever title, the author wishes to make a few comments about a young child's life, intellectual, social, emotional, and moral.

Intellectual. The concept of individual differences is so well known that it will be taken for granted that each child is born with a capacity which is partly quantitative in character. Some children are brighter than others. Aside from this quantitative element there are, however, aspects of intelligence which are common to all. Anything that is new fascinates; the world unraveling through the senses is an especially fascinating experience for the small child. Later, the ability to manipulate the world increases its fascination. Out of this process *interest* develops. But this interest is likely to move from one thing to another and little or nothing will be achieved.

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Grade I is bound to be a compote. Irrespective of brightness, the children will be jitterbugs, will-o-the-wisps, or busybodies. Some will be stodgy, lethargic, or intense. It is the teacher's job to organize this hodge-podge into a group that will accept the responsibility of conforming. The conformity here suggested is not restricted to behavior but includes the use of tools. Before entering school, a child has been free to use any tool—a leaky dishpan, a heap of sand, a deflated football, discarded dishes, or casual pieces of wood—in any way he wishes to aid his fantasy. Now he must learn to use a very special tool in the same way as everyone else does—namely written language, reading, handwriting, and arithmetic.

Oftentimes, unless he is introduced gradually into this rigid world of communication, he is baffled or frustrated and may fall back on an earlier pattern, namely passive resistance. This is too often interpreted as stubbornness and even mental retardation.

Once past the "ordeal" of accepting the restrictions of language and number formation, a child may be led into the wide scope of activities that may be carried on with these tools. Then what a child wants to do is *use* this tool, even though clumsy, for playwriting, story-writing, poetry, and counting. In the second and third grades of school far more emphasis should be placed on such experimenting alongside the necessary drill which is essential for the skilful use of words and numbers. Sometimes this may seem to his elders to be a fruitless occupation. But it will be well spent in terms of future motivation. A motivated child is a bright child no matter what the IQ.

Social. The child trainers have been stressing the necessity for a close relationship between parents, especially the mother, and their young children—and rightly so. This relationship is often loosely called "love." But—and a big "but"—the time will come when a child must get out from under this umbrella—or else.

In Grade I, a child may meet the first occasion on which he finds himself not entirely among friends, his family, relatives, or neighbors. The child's first step in emancipation is often difficult and may be accompanied by some reaction—withdrawal, explosion, wariness, or stoicism.

CLOSE CONTACT

But initial fears developed in the new environment are usually overcome by the promise of fascinating exploration; here are new faces, new opportunities, and new fields to explore. The children are in close contact with each other in lines, in washrooms, at tables, scuffling, wrestling, playing, walking along the street arm-in-arm, pushing, shoving. Contact is, indeed, closer than it ever has been or is likely to be. One must not belittle the learning in social skills that goes on at this time. The children can still regress to their family security, and so no harm is done if at times their social behavior is execrable.

The teacher must see that all these contacts are available. Groups are organized for various activities, but permanent groupings must be avoided. No child within a class should be permanently separated from the others. Yet some children prefer to be alone and uninterrupted. If the teacher is concerned about a "solitary" child in the early grades, she should get some considered advice before taking on a therapeutic job. During this early period of social activity, the teacher and parent can only hope that the child will learn to give before he takes and to enjoy the company of other children when he wants it.

Emotional. Children of this age

—six to nine—are feral in their emotional outlook. They are alert, aware, ready to run away (literally or figuratively), cruel, inconsiderate, explosive, hysterical, and hypocritical. They have other traits, of course, of which we approve.

When a child steps out of his home he meets a new situation, fascinating perhaps, but certainly fear-inducing. The fear remains with him always; consequently, he must learn to live with his fear or fears. This may sound pessimistic and disheartening but it need not be so. After all, adventure is the spice of life, and in all adventure is some fear.

THE UPSET CHILD

Yet the teacher must be on the alert to recognize the child who appears to be unreasonably upset. She does not know why and there is no reason why she should. Her first reaction, however, should be, "This child is afraid." Assurance, not reproach, is the remedy. Sarcasm, ridicule, humiliation, threats of the unknown, or painful humor should never be used. In the face of such abuse, children at this age become past masters at hiding their feelings *for the time being;* the aftermath is often not pretty.

Because children in the early grades have not yet learned to control anger, sudden outbursts of rebellion, resentment, and retaliation are part of their repertoire. Unless harm is done or impending, there should be no recrimination. The knowledge on the part of the child that the teacher *knows* that he is upset and is willing to overlook an immaturity is often the best procedure for inducing a more mature control pattern. Positively, of course, a good teacher never stimulates anger by encouraging personal competition in the classroom. The place for such anger-exercise is the playground. Within the classroom the atmosphere should be one of mutual help rather than personal aggression.

Morals. One must be very brave, or perhaps foolhardy, to include such a category as morals in a psychological schema. But since we are dealing with human beings and since some code of ethics has been and will remain an indispensable part of human desire, we must recognize its impact on early childhood.

For the first four or five years a child is wholly selfseeking, and blatantly so. The reaction to authority is to circumvent if necessary or to use if convenient. During the period from five to 10 years, two trends may be recognized in the child's behavior. First, there is recognition of the place of other human beings in the organization of one's life. This is still self-interest but it may develop such habits as consideration, manners, honesty, and mercy. This aspect of behavior may be taught and explained in terms of precepts such as "honesty pays," and "the golden rule." The rules are laid down and, if not obeyed, one may suffer for the violation—if one is caught. The

technique of "not getting caught" is very alive and often ludicrously effective in this early school age.

The second trend is actively different and also more difficult to define and study. During this age span a child begins to ask the question "Why?" and not just the word "why." He is beginning to grasp the concept of purpose vaguely. All human beings above a mental age of eight or nine years reach this stage; no animals ever do. As soon as one begins to explore this experience of purpose, the necessity for a code beyond selfinterest is axiomatic. How a child will react is again problematical. He may accept a code already prepared for him, only vaguely recognizing its function. At any rate, out of this thinking will emerge the concept of self which is one of dignity. The traits of integrity, loyalty, sympathy, and, finally, justice, will emerge, not suddenly but gradually. The example set by the teacher, the family, and the community is the most effective learning device. Precepts are futile; punishment and retaliation, puerile. It is in this area of child development that more research is urgently needed.

The outline above envisages a child endowed with a capacity to learn, thrust into a social milieu, caught in the throes of emotion, and eventually accepting a concept of the universe beyond immediate human experience. It also suggests that this child, for a few years, spends a few hours a day in a series of classrooms arranged in a hierarchy beyond his comprehension. The teacher has to deal with this material in flux. No wonder the teacher thinks that teaching is a tough job—but rewarding. •

The Psychology of Youngsters

• A LITTLE fellow calling on a neighbor with his mother suddenly said, "Mrs. Rand, may I see your new bedroom rug?" Pleased, the neighbor gladly gave him permission. The boy left, then reappeared, stating, "It doesn't make *me* sick!"—From *American Weekly.*

• Two first graders were standing outside school. Said one, "Do you think that thermonuclear projectiles will pierce the sound barrier?" "No," said the second. "Once a force enters the substratosphere . . ." Then the bell rang. Disgusted, the first one said, "There goes the bell. Huh, now we gotta go in and string beads."—From *Parade.*

• THE teacher ordered the first grader to sit in the corner for bad conduct. He retaliated with: "I may sit down on the outside, but remember I'm standing up inside."—From *The Texas Outlook.*

Let 'em Read Trash

ROBERT G. MOOD

In Elementary English

FIFTY years ago the teaching of reading was in many ways inferior to the teaching of it today, but it had one or two advantages over today's. The readers (that is the books used for the teaching of reading) were less mere pedagogical instruments and more collections of selections valuable for content. And—in the schools I attended, at least—there was very little prescriptive interference with children's choice of reading. There was, of course, much less reading material available to children than there is now, but we were free to read all there was.

No reliable statistics confirm the belief, but I think there was about as great a proportion of trash in the reading material available to us then as there is today. *More* trash today, perhaps, but no greater *proportion.* And we read it *all* freely. Then as now some child readers read only trash and never grew to anything better.

Today there is considerable thinking going on about censorship on children's reading. And at present there are several little tendencies to exercise such censorship. To any sort of censorship there are many valid objections—objections so serious that it must be to prevent very serious injuries indeed that a censorship is exercised. With these valid objections to censorship you are familiar. You know that a man wise enough to be a censor is too wise to take a censor's post. You know that censorship gives an adventitious attractiveness to things that would otherwise be ignored. I am considering forbidding my students the reading of Karl Marx's *Das Kapital,* for I think that if I did they'd all read it, and it seems to me that the interminable wastes and dullness of that dreary work would furnish an effective lifetime vaccination against communism.

Robert G. Mood is Head of the Department of English at the University of Wichita, Kansas. Reported from Elementary English, *XXXIV (November 1957), 444–50.*

Is it possible, however, that the inexperience and immaturity of children so much needs protection we should risk the dangers inherent in censorship in order to protect children from worse dangers? "What dangers?" we may reasonably ask.

Most present-day proposals for censorship of children's reading are directed to the comic books. The objectionable things about comic books may be taken then as the dangers to children in any reading matter. What are they? If we list the dangers and evils, eliminate the

trivial ones, and the supposed evils that are really only the objections of old people to having children's lives different from their own childhoods, we still have four things which many people would eliminate from children's reading: violence and terror, incitement to misconduct or crime, banality, and sex.

CHILDREN ARE TOUGH

In discussing these, I think we must, if our discussion is to be profitable, limit ourselves to healthy children. Children sick in mind or body doubtless should have limitations on reading as on food or play. I think, however, that adults don't realize the toughmindedness of children; the amount of violence and terror they can take without harm to themselves. Did the fights of the cannibals in *Robinson Crusoe,* the bloodshed of *Treasure Island,* the devouring of the ass by the boa-constrictor in *Swiss Family Robinson,* the murder of Dr. Robinson in *Tom Sawyer*—did these poison your childhood sleep and wreck your nervous system?

And there are valid reasons why it is actually unwise to shield children from all violence, terror, sorrow, and death in their reading. The way to cure a child of fear of the dark is not to deny the existence of dark, but to walk with him in the dark, and show him by example the restful quiet of it, and to show him, too, how to avoid breaking his neck by stumbling over something he can't see. Oh, you can't shield a child from grief. But you can help him learn not to run away from it.

INCITEMENT TO CRIME

Perhaps the "incitement to crime" charge against comic books and children's books in general is more serious. It is true that the newspapers have carried a good many stories about child criminals who said they gained the ideas for their crimes from comic books. But if you will recall from your own childhood your own answers to your elders' "Why?" when you were caught in misdeeds, I think you'll agree that the reasons children give for their crimes are seldom valid.

I think it likely that the crime rate *is* much higher among children who read only comic books than it is among children who read better things. But isn't this merely that juvenile crime, like adult crime, is commoner among the stupid than among the intelligent? All children have antisocial impulses—criminal impulses if you will. They need no prompting from reading. But most children of normal intelligence learn, or are taught, to curb these, not alone from fear of consequence, but because they learn socially approved ways of getting what they want.

And if reading about crime suggests criminal acts, we will have to suppress some very respectable books: The Bible and Shakespeare, even *Silas Marner* and *The House of Seven Gables.* True, murder by knife is treated in one way in *Macbeth* and in another in *True Crime*

Comics, but neither book really promotes knifings among healthy boys.

The proposals to censor children's reading to protect children from corrupting their taste and their intelligence by reading trash, garbage, and banality seem to me the most plausible defense of censorship. The only objection to censorship for this purpose is that it won't work. You don't protect children from corrupting their musical taste by forbidding them to hear Elvis Presley—you do so by exposing them to good music.

FOSTER GOOD TASTE

It is my special job to foster good taste in literature by exposing young people to good books. In a garden you foster flowers by extirpating weeds, but in the mind of a young human being you don't extirpate the weeds but crowd them out, as you free a lawn from weeds by making the grass grow so lushly it starves the weeds. Did you ever notice that there are more weeds in the garden than there are in the pasture?

There remains for consideration the censorship of young people's books to eliminate objectionable presentations of sex. There is in children's books, especially certain comic books, a lot of objectionable treatment of sex. But even some books designed to give children information about reproduction and copulation err in exactly the way the army lectures on sex erred. These lectures, you may remember, told a great deal about the terrors of syphilis but very little about the bliss of a happy marriage; made much of the court-martial penalties for fornication but very little about the compensations possible in a celibate life. Fortunately there are better things appearing on publishers' lists for children.

SECRET AND SOLITARY

But I think this is not what those who'd censor sex out of children's books are talking about. They are talking about the stories and "romances" (God forgive the "logicide" or word-murder!) which titillate a secret and solitary sex excitement in the young. "Secret" and "solitary"!

Margaret Mead (*Coming of Age in Samoa* and other fine sociology studies) has a very fine essay on "Censorship and Sex in Contemporary Society." It is the best discussion of its subject I have read. Here are a few sentences from her long, serious, and objective exposition of the defensible basis of society's right to regulate books:

"It is useful to distinguish between the pornographic, condemned in every society, and the bawdy, the ribald, the shared vulgarities, and jokes which are the safety valves of most social systems. Pornography is a most doubtful safety valve. In extreme cases it may feed the perverted imagination of the doomed man who starts by pulling a little girl's braids and ends by cutting off a little girl's head, as each increasing stimulus loses its effectiveness and must be

replaced by a more extreme one. This is particularly true of the pornography primarily designed to be brooded over in secret. But it is quite otherwise with music-hall jokes, the folk ribaldry at a wedding, the innocent smut of the smoking room where men who are perennially faithful to their wives exchange stories that lead to explosive laughter.

"Pornography does not lead to laughter; it leads to deadly serious pursuit of sexual satisfaction divorced from personality and from every other meaning. The uproarious laughter of the group who recognize a common dilemma—the laughter of a group of women at the story of the intractable unborn who refused to budge but only shivered under the effects of the quart of ice-cream hopefully eaten by its poor mother; the laughter of a group of men at the story of the bride who asked to be "frightened" a fourth time—is the laughter of human beings who are making the best of the imperfect social arrangements within which their life here on earth is conducted, colonizers of heaven working with recognizable, imperfect equipment for the development of the human soul.

"Such laughter is the counterpoint of the good life. Shared, consecrated by usage and tradition, it is an underwriting of virtue rather than an incitement to vice. Like every other kind of material which deals with the body, and especially with sex, these jokes can be misused, or labeled pornography, when they are not, but the criterions of happy sharing and of laughter holds."

This material was written with adults in mind, but some of it, at least, is applicable to adolescents or even younger children. A wise school principal of a junior-high school near my home broke up a snickering smut session on the playground of his building, not by thrashing the participants, as was the custom in my day, nor by the self-important, solemn, humorless lecture of a decade later, but by contributing to the session a really funny malaproprism made by a high-school athletic trainer trying to use medical language instead of locker-room language in explaining to the mother of a boy who was injured in a game. His story brought a real lusty laugh instead of the guilty snickers and presently the boys were back playing at the soccer game.

It is obvious that it is no longer possible to refuse to answer a young person's questions about sex; the choice is between an honest answer and a misleading one. Even "Why don't you ask your father or your family doctor" is an answer.

So while I think existing statutes against pornography should remain as the one admissible censorship, I think it even better to immunize young folks against the disease of secret and solitary brooding over sex, by giving them accurate information and by letting them use as fast as possible the adult's safety valves of shared laughter. •

1958

The Married Student in College

"Do You Take This Coed . . .?"

RICHARD P. BAILEY

In Wisconsin Journal of Education

THE combination of college and marriage was an aftermath of World War II and the married student was expected to vanish along with the quonset-hut classroom. Most of the temporary classrooms are gone now but the married student still remains.

That is how it is in Wisconsin. Among every seven undergraduate students from the University or a state college in Wisconsin, one is married. It's a common indoor sport for oldsters to shake their heads and mutter about today's impetuous youth. In the case of the married college students the ancient are wrong. There are no spring romances beginning at the prom and ending after a whirlwind courtship before a sleepy justice of the peace. Average length of courtship was 18 months among the 732 married college students studied by the Wisconsin Board of Regents of State Colleges. Only eight students knew each other for less than six months before marriage.

Many other interesting facts were learned during the inquiry. Students were asked about the attitude of their parents toward their marriages. They "definitely approved" or "reluctantly approved." There were some who were "somewhat opposed" but only a few were "definitely opposed."

Richard P. Bailey is Director of Public Information, Board of Regents of Wisconsin State Colleges, Madison. Reported from Wisconsin Journal of Education, *XC (October 1957), 11–12.*

"My mother hoped I could finish college first," said an Eau Claire junior, "But my higher college grades after marriage have changed her mind."

Higher grades after marriage were not unusual. Among the 456 students who were enrolled in college before marriage, more than half watched proudly as their grades improved. Only 26 students have been unable to keep up their premarriage grade average—due generally to part-time work loads financially necessary.

This is the biggest single problem faced by the married students—finance. They pay an average monthly rent of $45 for an apartment rented to them by the college or a private landlord. Total cost-of-living they estimate at $200 a month. Many have children and the cost is higher accordingly. If the married couple lives at home, costs go down or are shifted to dad. Only 32 do live with parents. Their monthly expenses average well below $100.

Married students finance their college through G. I. benefits, or part-time work. These comprise the largest group, but "use of savings," "help of parents," "full-time jobs," "borrowing," and the "cashing of bonds" are also mentioned as means of financing their college careers.

Almost all of these students own a car, but it's probably five years old. There are television sets in 61 percent of the students' homes and refrigerators in 71 percent.

Teaching is the choice of profession of 78 percent of the married students. There are 384 in secondary education and 185 in elementary. The fathers of these young people are most often farmers, laborers, mechanics, carpenters, teachers, and foremen-supervisors. A few have fathers who are clergymen, attorneys, dentists, and engineers.

These married students were asked about happiness. A LaCrosse senior wife puts her finger on a key to happiness in college marriages. "The marriage has to be a partnership," she says. Then after a reflective pause, "We have been very happy." She and her husband agree on hobbies, friends, politics, sports, and religion. Not all of the young marrieds do.

But a Whitewater senior wife who has a religion different from her husband's, hobbies different, and is active in a political party not his has been happily married for a year. "In addition to our differences we have a 'drippy' faucet and a broken stove," she says. "But we are not complaining. Life is too short to miss all the happiness we have found."

In general the advice the married students give to others on mixing marriage and education is—"Go ahead, but carefully."

"Nothing like it," says a Superior senior, "I never ate so good in my life before!" And a practical freshman husband from Oshkosh says, "It costs more to date a girl than to marry her—in the long run." Incidentally, the "night out" among college marrieds most often takes the form of visiting friends or inviting friends in for the evening, although college dances, plays, and concerts are also well attended.

Not all are wholeheartedly in favor of the married life at college. "Marry if you are willing to make sacrifices," says a La Crosse senior husband. "That includes helping take care of the house, washing dishes, and laundering clothes." And another—the married freshman father of two children—advises, "Have fun in college. You can always get married."

College and university officials are aware of the problems faced by married students. Housing is being provided at some institutions. Says William D. McIntyre, chairman of the coordinating committee for higher education in Wisconsin, "If the trend for undergraduates to mix marriage and education is established, as it seems to be in Wisconsin and the nation, then it becomes an obligation to provide facilities to meet the needs." •

1958

The Shotgun Approach Is Unsound

The Philosophy of Public School Adult Education

ARTHUR P. CRABTREE

In The Public School Adult Educator

WHAT is your philosophy of adult education? The truth is that many persons now engaged in adult education in this country have never taken the time to formulate a philosophy about it. To these persons I should like to suggest some elements which, in my opinion, are minimum essentials of such a philosophy.

First, adult education must be conceived as genuine education. To many it is still regarded as a sort of nondescript sideshow of bizarre activities, primarily designed to keep our adults with time on their hands busily untroubled.

Second, you must have a deep-seated conviction concerning adult education's role in a dynamic society. It is the adult who must make the decisions for democracy. The world of lightning change which swirls about us is the product of adults, not children. Education *is* life, as John Dewey affirmed, and nowhere is this principle more convincingly illustrated than in the field of adult education. The adult must be given the wisest information and the latest facts in order to cope with living problems. Throughout our history we have fostered a curious contradiction in American education. We have educated youth, who could not act in democracy's affairs, and expected the adult to make our societal decisions without benefit of educational assistance. A belief, therefore, in this great role of adult education in our democratic society is requisite to your philosophy.

Arthur P. Crabtree is Head of the Civic Education Service, Bureau of Adult Education, New York State Education Department. Reported from The Public School Adult Educator, *I (November 1957), 19–20.*

Now, let's consider another important issue you're going to have to wrestle with in forming your philosophy of adult education, especially if you are an administrator. This concerns the primary purpose of the public schools in our democracy. There is one school of thought which believes that the basic purpose of all education is the development of the individual as such. There is another which holds that the central purpose of education in our society is to perpetuate democracy itself.

In the report of the Lusk Committee, a joint legislative committee set up in New York State (1920) we find this conclusion: "The prime purpose of the educational system is to prepare students in the public

schools to assume the obligations and duties of citizenship in this state. The public school teacher is a representative and officer of the state as it now exists." And, may I add at this point, that I am aware of the argument advanced by those who insist that we cannot separate the interests of the individual from those of the state and that the distinction is merely an academic one. I submit, however, that there is a very real difference facing any director of adult education when he sets out to build a program for his community. He may have a request, for example, for a class in typing for women who have found it necessary to earn their own livelihood in their later years. On the other hand, he may have a request for a discussion group in community problems. Admittedly, the difference is one of degree but, surely, it is rather obvious that the one exists primarily for the economic betterment of the individuals who are learning to type and the other primarily for the betterment of the total community.

This is the choice which the administrator of adult education must always face in building his program. He can build it with an emphasis on those activities which serve the individual interests of his people most directly or he can emphasize those activities which seek to improve the societal aspects of his total community. Better still, of course, he can do both.

In public school adult education we have followed the give-them-what-they-want philosophy. "What they wanted," in most cases, was an educational menu which catered to their needs as individuals. Somewhere along the way we have forgotten that a form of government which stakes its preservation on the wisdom and understanding in their hearts and minds is its first responsibility. It must protect and preserve the interests of democracy by constantly providing opportunities for learning that stimulate and enrich the awareness of the individual for societal problems. This is acutely incumbent on public education in these days of ideological war.

A PARAMOUNT PRINCIPLE

These are questions which affect the administrator and teacher alike in adult education. There is a principle which I believe paramount to all others in the actual teaching of adults. It relates to the individual's rate of progress. In the education of youngsters, we are in the rigid hold of a tradition that compares Willie Jones with Jimmie Smith and we grade them accordingly. This cannot be in adult education. No individual adult should be compared with another for the purpose of determining his rate of progress. The background of individual differences is too diverse. The teacher has no common yardstick of measurement.

The adult who comes to our classes is in competition only with himself. The wise teacher is concerned with only one thing: the degree of development which oc-

curs in the adult from the time he enters the classroom until the time he leaves. The teacher's task is simple: to help the adult reach ever higher and higher toward the summit of his aspirations and the maximum realization of his potential as a human being in a dynamic society.

There is one other attribute of the good teacher of adults which takes on a philosophical aspect. In perhaps no other sphere of education does a teacher have the opportunity to follow the teachings of John Dewey as in the field of adult education with respect to emphasis on the student over subject matter. The teacher must remember that she is teaching the *whole* man and that the whole man comes to class with all his adult problems, his hopes and his heartaches, his urgencies and his ulcers. No superficial application of subject matter will suffice. The teaching must be kindly and sympathetic, born of the realization that the average adult is an infinitely complex personality and that subject matter is secondary in importance to the learner.

In closing, I repeat my original question: What is your philosophy of public school adult education? Certainly you must have one. It will lend dignity and purpose to your task. No director of adult education should ever sit down to plan a community program without having formulated a set of values and guiding principles. No teacher should ever walk into a classroom of adults without having first established certain fundamental convictions toward the job to be done. The shotgun approach in adult education is as unsound as it is in any other field of human endeavor. •

Parent Education

• Little Rudi's young and attractive mother has a streak of white hair almost in the center of her forehead which she normally concealed among her dark locks. However, she decided on the new hair style which prominently shows off that white strip. Rudi was the first to notice the new hairdo. With all the enthusiasm of a nine-year-old, he called out, "Oh, how nice you look, Mother! Just like a skunk."—From *Parents Magazine.*

• It was naptime and Mother was trying to cut short Peggy's dawdling. "I don't really mind hurrying, Mother," Peggy said reassuringly, "if you'll only let me hurry slow."—From *National Parent-Teacher.*

• The real oldsters are those who remember when child guidance was something parents were expected to administer, not to submit to.—From *The Boardman.*

With Education in Washington

THE EDUCATION DIGEST WASHINGTON BUREAU

Simply Stated.—Put up or shut up. In its bluntest terms, that's what Congress has been told by the nation's largest educational organization.

The National Education Association's recently announced legislative program—the most far-reaching set of recommendations ever made by any educational group—also signals the end of an era. "Education's traditional hat-in-hand approach to the question of federal aid is a thing of the past," said a spokesman.

Why the change in philosophy, the bold approach? "Schools have been starved too long," says NEA Executive Secretary William G. Carr. "The public schools are trying to defend our way of government and advance the well-being of the nation, yet many people don't want to give education the necessary funds to help."

Another NEA spokesman put it in different terms. "If Russian Sputniks are as serious a problem as we have been told, then Congress should provide the funds to help us turn out better, more technological-minded students," he said.

Specifically, NEA's program calls for a five-year federal outlay of almost $5 billion. The money would be spent in accordance with the following plan:

√Federal contributions would begin with the allotment of $25 per child, steadily increasing to at least $100 per child in five years. School districts could use the funds, if they wished, to increase teacher salaries, build schools, or purchase equipment.

√Federal support for scholarships would begin with 20,000 a year at the undergraduate level, increasing gradually to 80,000 scholarships by the end of four years. Federal aid for 5,000 graduate fellowships would rise to 15,000 after three years.

√Federal grants would also be used to strengthen all services of the state departments of education.

In addition, the NEA will continue fighting for a bill to permit teachers to deduct from their income-tax expenditures made for professional growth, as proposed by the King-Jenkins bill.

In years past, the NEA would throw its support behind a specific bill containing the provisions it favored. This year (aside from the relatively minor King-Jenkins bill) the NEA is not associating itself with any specific piece of legislation. Instead, it will weigh any proposed measure to see if it offers any part of the aid the NEA thinks necessary. Furthermore, any bill will also have to meet three additional criterions. Here they are:

1. *Freedom of choice.* Federal scholarships at the undergraduate level should be awarded for students to attend institutions of their own choice and to pursue courses of study that meet their career goals.

While graduate fellowships might be awarded in specified fields where there is a shortage of manpower, freedom of institutional choice should be permitted.

2. *Control of education.* State, local, and institutional control of education can be best maintained if federal education programs are located in the U.S. Office of Education. Federal funds for elementary and secondary education should be allocated to the states on an objective basis to be administered by the established state educational agencies with which the local school districts are accustomed to deal.

3. *State and local efforts.* Federal legislation should be designed to encourage a greater effort to finance education from state and local resources. The application of matching requirements and other measures to stimulate state and local effort should take into account that states need a reasonable amount of time to increase their spending for education.

The New and the Old.—There have come into being a new math and a new science. And there still exist the math and the science of the textbooks written and published two decades ago. How—and how soon—can the high school begin teaching the new and push out the old?

This is the question the National Association of Secondary-School Principals has to answer with and for its members. The first formulation of the response was made by an 18-member committee of the NASSP at a meeting held in Washington last month. The final response will be formulated before the annual convention of the association in February.

Long and tortuous will be the process of modernizing science and math instruction in America's schools, secondary-school educators predict. First, of course, high-school principals themselves are not aware of the fast-moving changes that have taken place in traditional math and science content. Second, few teachers are prepared to teach the newly merged concepts in science and math. Textbooks to help them may be five to eight years in coming.

Complicating these two factors is a kind of shock and incredulity on the part of secondary-school faculties and administrators: "Is there really a new science and a new math or is it all fad? Were not those scientists who gave us atomic energy trained in traditional schools with old-fashioned textbooks?" To which one school administrator replied: "There is really a new math and a new science. And while present-day atomic scientists were trained in traditional schools, no one can estimate to what extent they—and the nation—have been held back as a result."

The best thinking at present proposes that pupils of low and average intelligence continue to get the usual doses of traditional science and math. The gifted high-school pupils shall be gradually introduced

to the new material, provided high-school principals can fine gifted teachers for them.

Hello, "Mr. Chips."—Some of the nation's top higher-education teaching talent—now in involuntary retirement—will soon be back on campus.

Taking "Mr. Chips" off the inactive list is the object of the newly established Retired Professors Registry—a Ford Foundation-backed joint undertaking of the Association of American Colleges and the American Association of University Professors.

To the sponsors of the Registry it makes little sense to talk of "critical college teaching shortage in the face of mounting student enrolment" when qualified teaching talent sits by in idle retirement. "The rigidity of retirement systems keeps many faculty members from remaining in their present positions," said Dr. Theodore Distler, executive director of the Association of American Colleges.

Those in good health with a real desire to return to classrooms in schools, other than those from which they have been retired, should have the opportunity of doing so, he said.

Here is how the Registry will work:

Retired professors are asked to furnish the Registry with a résumé of their experience, references, salary expected, and preference as to location.

At the same time, schools and colleges will be asked about their needs for teachers. When a request from a school is received, the Registry will match the requirements against the qualifications of the individual professors and contact those who seem to fit the bill. From there, the professors are on their own, free to conduct their own negotiations.

Although it has been in operation only since last month, there has already been a good response both from schools and retired professors.

Actual administration of the Registry is being handled by Dr. Louis D. Corson, former dean of men at the University of Alabama, who is not a retired professor.

The Registry's sponsors are careful to point out they are not making any criticism of mandatory retirement policies of some institutions. State and city schools, for example, are powerless to change those policies in the face of Civil Service and similar regulations.

The Registry has been set up as a five-year program. Whether it will continue beyond that depends on future teaching needs and the success of the program.

The Registry operates from the national headquarters of the American Association of University Professors, 1785 Massachusetts Ave., NW, Washington 6, D.C.

The Sputniks Did It.—The machinery is now in operation to bring about a first-hand comparison between American and Soviet educational systems.

Although the U. S. Office of Education denies it, impetus for the program—which has been in the talking stage for years—has been the appearance of Sputniks I and II.

Groundwork for the exchange of teams of American and Russian educators is being laid by Oliver J. Caldwell, director of USOE's Division of International Education. Caldwell left for Russia last month on a mission he has been promoting for some five years.

A variety of barriers prevented the trip before this—among them an "ostrich-like" attitude on the part of high-placed officials here. But Russia's tremendous jump on us in the missile field, plus the mounting evidence that the Soviet educational system is far better than we had previously been led to believe, has resulted in a mass "eye opening."

Depending on the success of his trip, teams of Russian educators could be over here—and groups of American schoolmen in Russia—as early as the spring of this year. The emphasis on his negotiations with Soviet officials will be on exchanging "teams" of educators, rather than individual schoolmen.

The International Education Division head is also hoping to do some preliminary looking himself, visiting Russian high schools and universities and perhaps picking up on the way a number of textbooks for further study.

Prospects for the success of his trip are considered here to be excellent, in view of Russia's consistently favorable attitude to the idea.

On his travel in Russia, Caldwell will undoubtedly cross paths with a group of American educators participating in a privately sponsored tour. The group sponsored by the Comparative Education Society, consists of college and university professors who are visiting Russian educational institutions while at the same time promoting the idea of similar tours in the U.S. by Russian schoolmen.

Victory of Sorts.—"Reserved for educational use"—that Federal Communications Commission ruling which once roused the ire of commercial TV interests hardly draws a protest these days. The battle of the TV channel reservations has virtually ceased to be an issue.

Educational television's advocates hail the current situation as a victory. In a sense it is. But the facts are that commercial TV interests have decreased their challenges of FCC reserved channels because the great bulk of the still unused channels are in the less desirable ultra-high frequency (UHF) band.

What does constitute victory for the ETV movement, though, is the fact that the number of reserved channels has been increased from the 242 which the FCC originally set aside back in 1952 to the present 256. That only 31 of these channels are currently in use—with the figure expected to rise to 42 by 1958—only slightly dampens ETV partisans' spirits. •

• Educational News •

Changes in Superintendencies:

New York, N. Y.: **John J. Theobald**, deputy mayor of New York City for the past two years while on leave from the presidency of Queens College, has been named to succeed **William Jansen** as superintendent on his retirement in September.

Wichita, Kan.: **Lawrence H. Shepoiser**, formerly superintendent at Mason City, Ia., has been appointed successor to **Wade C. Fowler**, effective July 1. He is serving as superintendent-elect until then. Mr. Fowler, superintendent since 1945, who asked to be relieved for health reasons, will serve as assistant for research and training.

Toledo, Ohio: **E. L. Bowsher**, superintendent since 1937, has resigned to become secretary-manager of the Toledo Automobile Club.

Bridgeport, Conn.: **Augusta Mendel**, formerly deputy superintendent, has succeeded **Joseph E. Jeffery**, retired.

Milton, Mass.: **E. Davis Woodbury**, formerly superintendent at Natick, Mass., is now superintendent, succeeding **Owen B. Kiernan**, who is now Massachusetts state commissioner of education.

Bessemer, Ala.: **James O. Knuckles**, formerly director of instruction at Clarksville, Tenn., is now head of schools.

College Presidents:

University of Kansas City, Mo.: **Richard M. Drake** is now chancellor.

Wisconsin State College, Plattville: **Chester Newlun** will retire this spring.

Geneva College, Beaver Falls, Pa.: **Edwin Cameron Clarke** has been inaugurated as president.

Other Changes and Appointents:

Roy M. Hall, formerly director of the Southwest School Administration Center and professor of educational administration, University of Texas, is now assistant commissioner for research, U. S. Office of Education.

Donald L. Sandberg, formerly director of productions for the Indianapolis schools, has been appointed director of distribution for the Educational Television and Radio Center, Ann Arbor, Mich.

Robert Johns, director of the U. S. Armed Forces Institute, Madison, Wis., since 1953, has been named director of the Illinois Commission on Higher Education.

Jeanne Rogers, formerly staff reporter for the *Washington Post* and *Times Herald*, has joined the Washington staff of the National School Public Relations Association as managing editor.

Lawrence A. Kimpton, chancellor of the University of Chicago, has been elected chairman of the American Council on Education.

Recent Deaths:

Lacey A. Eastburn, president of Arizona State College, Flagstaff, since 1947.

George Alan Works, retired professor of education at the University of Chicago and a former president of Connecticut Agricultural College, at the age of 80.

Russians to Visit U.S.

Fifty professors from Russian institutions of higher education will visit American schools during November this year, Dr. William W. Brickman, president of the Comparative Education Society and professor of education at New York University, announced in January.

The visit, which will be the first by a delegation of Russian professors in education and related fields, was arranged by the Comparative Education Society and the Educational and Scientific Workers Union of the USSR, under an agreement that calls for a similar trip to Russia by American professors. The

U.S. educators will visit Soviet schools during August and September.

The agreement was concluded in Moscow on December 24. In addition to the reciprocal visits, an exchange of publications and educational materials was arranged by the two groups.

School Construction Agency

THE Ford Foundation announced in January an appropriation of $4.5 million to establish the Educational Facilities Laboratories, an independent, nonprofit organization concerned with research and experimentation leading to improvements in the construction of school and college buildings.

The new agency will also serve as an information clearinghouse. Its data on school design, building, and equipment will be available to architects, local school systems, college trustees, and others involved in the nation-wide expansion of educational facilities anticipated in the next decade.

Headquarters for the new organization will be in New York City. The $4.5 million appropriation from the Ford Foundation will finance the organization for the next five years. More than half of the funds will be used for experimentation in the field of school construction and equipment through grants to educational institutions.

They will also support several cooperating experimental centers that will serve as research laboratories and demonstrations of efficient construction and furnishing of educational facilities.

Members of the board of directors of the Educational Facilities Laboratories are: Henry Dreyfuss, New York industrial designer; James C. Downs, president of Real Estate Research Corporation, Chicago; Morris Duane, Philadelphia attorney; Alvin C. Eurich, director, Fund for the Advancement of Education; Frederick L. Hovde, president, Purdue University; Devereux C. Josephs, New York Life Insurance Company; James L. Morrill, president, University of Minnesota; Milton C. Mumford, executive vice-president, Lever Brothers Company; Frank Stanton, president, Columbia Broadcasting System; Thomas J. Watson, Jr., president, International Business Machines; and Benjamin C. Willis, superintendent of schools, Chicago.

An advisory council composed of representatives of architectural, educational, parent, and other groups will be named later.

AASA Elects, Meets

MARTIN ESSEX, superintendent of schools at Akron, Ohio, has been chosen president-elect of the American Association of School Administrators in a mail ballot.

Mr. Essex will serve in this capacity for a year beginning in March, and will begin a one-year term as president in March, 1959.

C. C. Trillingham, superintendent of schools for Los Angeles County, Calif., will succeed Philip J. Hickey, superintendent of instruc-

tion at St. Louis, Mo., as president of the AASA this March.

This month and next are busy times for the AASA. In addition to installing new officers, the AASA will be holding its three regional conventions. The first will be held in St. Louis, February 22–25; the second in San Francisco, March 8–11; and the third in Cleveland, March 29–April 1.

James B. Conant, former U.S. Ambassador to West Germany, will keynote all three conferences. He will speak on "The Superintendent as an Educational Statesman."

Other speakers at the conventions will include: Lawrence G. Derthick, U.S. Commissioner of Education, who will speak at the St. Louis and Cleveland meetings; Henry Steele Commager, Columbia University, who will speak in California; Chester Bowles, recently ambassador to India, and G. Mennen Williams, governor of Michigan, both of whom will speak at the Cleveland meetings; and Pauline Frederick, NBC correspondent at the United Nations, who will speak at the San Francisco session.

The 1958 Golden Key Awards will be made at the St. Louis meeting. U.S. Secretary of Health, Education, and Welfare Marion B. Folsom and his former teacher, Miss Lila Windsor of Georgia, have been named recipients of the annual awards.

Teaching Career Month

A NEW plan to dramatize the importance of the teacher in our national life will be inaugurated by the National Education Association this April.

To be called "Teaching Career Month," the event will focus national attention on the recruitment, training, and retention of top-quality teachers. More than 50 professional and lay organizations will cooperate in the venture.

Plans for the month's activities were made at a meeting held in the NEA headquarters in Washington, D.C., in January.

New USOE Survey

AMERICA'S future crop of scientists and mathematicians may be forecast more accurately as a result of a nationwide survey—the first of its kind—now being conducted by the U.S. Office of Education.

About 1100 colleges and universities have been invited to participate in a tally of college juniors majoring in science and mathematics.

The survey, according to Lawrence G. Derthick, U.S. Commissioner of Education, should help educators deal with the problem of "drop-outs" of science students. Being on the junior-year level, the count will provide a basis for estimates of the number of new scientists and mathematicians with bachelor degrees two years hence.

The survey will be continued annually.

Better Physics

A PROGRAM to help improve the quality and quantity of physics

taught in high school and college has been launched by the American Institute of Physics.

The program is being conducted in collaboration with the American Association of Physics Teachers and the American Physical Society with the support of the Fund for the Advancement of Education and the National Science Foundation.

The plan has the following objectives: to make a study of a basic course in physics a "must" for every secondary-school student; to encourage qualified young people to seek careers in physics; to evaluate the feasibility of teaching physics by use of television and color motion pictures; and to assess the increasing need for physicists in a technological society and to strengthen physics instruction for nonscience majors.

Urgent Needs

IMMEDIATE emphasis on higher education at the graduate level, increased stress on the recruitment and education of teachers, and enduring public support of education were urged by the Educational Policies Commission, after a special meeting in January to discuss the nation's most pressing educational needs.

In a special statement, "The Contemporary Challenge to American Education," issued after the meeting, the Commission also pinpointed three strong needs that should be met as quickly as possible: earlier identification and more thorough development of gifted students; stepped up guidance programs for students of all ages and abilities; and improvement in teaching at all levels.

Composed of 20 of the nation's leading educators, the Commission is sponsored jointly by the NEA and the AASA.

AASA Brochure

MORE mileage has been gotten out of the school building dollar than people in this country are getting out of the dollars they spend for nearly any other product or commodity, according to the brochure "Stretching the School Building Dollar," recently issued by the American Association of School Administrators.

The publication states that during the past 20 years the cost of school buildings has increased 150 percent, while the cost of all buildings has increased 210 percent.

The brochure lists several reasons for this economy in school buildings. Copies of the brochure are available from the Association, Washington 6, D.C.

Study of Standards

THE Texas Education Agency announced at year-end that it was beginning a study to explore the possibility of using standard and correlated dimensions for material components used in school construction.

The study does not imply the use of prefabricated or standard buildings but contemplates the development of standard dimensions

that will permit present flexibility of design and construction, the Agency announced.

The study is made possible by a research agreement with the U.S. Office of Education and the Texas Education Agency. The over-all study director will be Leon R. Graham, assistant commissioner for administration of the TEA.

Library Week

"WAKE Up and Read!" will be the theme of the first National Library Week, to be observed March 16–22.

The observance is sponsored by the American Library Association and the National Book Committee. The purpose of the new "week" will be to encourage people to read and realize the joys and profits books bring. It will focus attention on the vast network of public libraries and on the school, college, and home library.

Textbook Prices Up

TEXTBOOKS will cost more in 1958–59. This assertion is the result of a survey recently conducted for the American Textbook Publishers Institute.

The survey showed that the average price of textbooks has increased 5 percent during the past year. In conducting the survey, leading publishers were asked the prices of various of their most widely used books on January 1, 1958, compared with a year ago.

The average catalog price for elementary textbooks is $2.52, and for high-school textbooks, $3.99.

DATES OF THE MONTH:

Feb. 6-8, NEA-sponsored Conference on the Gifted, Washington, D.C.

Feb. 15-19, National Association of Secondary-School Principals, Indianapolis, Ind.

Feb. 20-22, American Association of Colleges for Teacher Education, Chicago, Ill.

Feb. 22-25, American Association of School Administrators, regional convention, St. Louis, Mo.

DATES OF THE COMING MONTHS:

Mar. 2-5, Association for Higher Education, Chicago, Ill.

Mar. 2-6, Association for Supervision and Curriculum Development, Seattle, Wash.

Mar. 8-11, American Association of School Administrators, regional convention, San Francisco, Calif.

Mar. 16-22, National Library Week.

Mar. 19-26, Music Educators National Conference, Los Angeles, Calif.

Mar. 22-26, Department of Elementary-School Principals, NEA, Philadelphia, Pa.

Mar. 27-29, National Science Teachers Association, Denver, Colo.

Mar. 29-April 1, American Association of School Administrators, regional convention, Cleveland, Ohio.

Mar. 30-April 3, American Association for Health, Physical Education, and Recreation, Kansas City, Mo.

Mar. 31-April 3, American Personnel and Guidance Association, St. Louis, Mo.

April 6-12, International Council for Exceptional Children, Kansas City, Mo.

April 8-11, National Catholic Education Association, Philadelphia, Pa.

April 9-12, National Council of Mathematics Teachers, NEA, Cleveland, Ohio.

April 17-19, National School Boards Association, Miami Beach, Fla.

April 21-25, Department of Audio-Visual Instruction, NEA, Minneapolis, Minn.

April 29-30, American Industrial Arts Association, Boston, Mass.

New Educational Materials

Education and Philosophy; The Year Book of Education, 1957. Edited by George Z. F. Bereday and Joseph A. Lauwerys. Yonkers-on-Hudson, N.Y.: World Book Company, 1957. Pp. xii + 578. $8.50.

This is the fifth volume in a series prepared under the joint editorial responsibility of Teachers College, Columbia University, and the University of London Institute of Education.

In preparing this book on the nature of knowledge, of society, and of man, the editors asked more than 40 scholars, social planners, and educational administrators from all parts of the world to write on different aspects of the central theme.

The book is divided into six sections: The Great Traditions, Determinants of Policy, National Systems, Historical Examples, Experimental Institutions, and the Teaching of Philosophy of Education.

The scholarly treatment of the issues and the reputations of the contributors make this a valuable book.

Modern Education and Human Values. Milton E. Lord, *et al.* Pittsburgh, Pa.: University of Pittsburgh Press, 1957. Pp. 128. $3.00.

This book, Volume VI in the Pitcairn-Crabbe Foundation Lecture Series, contain five lectures delivered at the University of Pittsburgh School of Education during the school years 1954–57.

The volume includes talks by Milton E. Lord ("Arsenal of Democracy"), Robert E. Mathews ("Professional Education and the American Tradition"), Edwin Prince Booth ("Moral Values and the Study of Biography"), Filmer S. C. Northrop ("The Union of the Sciences and the Humanities"), and Margaret Chase Smith ("The World We Live In").

Education for a New Morality. Agnes E. Meyer. New York: The Macmillan Company, 1957. Pp. xiv + 91. $2.50.

This book, the 29th volume in the Kappa Delta Pi Lecture Series, attempts to heal the gap in thinking between science and humanism and to contrast the earlier, primarily rural society with the new urban industrialism. The author sees the cold war of the future shifted from a "competition in arms" to a "competition in brains."

The author makes a plea for higher ethical standards acceptable to all mankind. She outlines in detail ten moral insights necessary to achieve a "new liberalism."

Soviet Education for Science and Technology. Alexander G. Korol. New York: John Wiley & Sons, 1957. Pp. xxv + 513. $8.50.

This book is a detailed discussion of the scientific and technological training of Soviet youth. It reveals in some measure why the Soviet Union has scientists who could create and launch a Sputnik while Americans were merely thinking about it.

The information contained in the book should be of interest to our colleges, but it has particular significance for those educators who are responsible for education of less than college grade in this country. The first third of the book is devoted to a consideration of the education of youth up to 17 years of age. The remainder deals with higher education in Russia.

It is apparent from the section on the Russian technicums that the standards of achievement in that country are far beyond anything we have set up in this country. Evidence of this appears in the sample syllabus in physics and mathematics, which outlines the scope to be covered by the teacher, and outlines the specific areas of subject matter on which the final examination will be

based. Quite obviously the field covered is designed to develop abstract thinking, a characteristic which is essential to anyone who is expected to deal with obscure problems that arise in the creation of satelites.

Alexander Korol was born in Russia and received his secondary education there. He is now an American citizen and is on the senior research staff at the Center for International Studies at Massachusetts Institute of Technology.

Parents and the Schools. Washington, D.C.: Department of Elementary-School Principals, NEA, 1957. Pp. viii + 310. $3.50.

This 36th yearbook of the *National Elementary Principal* covers many aspects of lay citizen participation in educational programs. Included are such topics as patterns of responsibility and authority, the role of the principal in working with parents, discussion groups and advisory committees, interpreting the school program, parent-teacher conferences, and cultural influences on home and school cooperation.

In all, a total of 57 articles on the theme are included. A. Raymond Ebaugh, principal of Whittier School, Royal Oak, Mich., was chairman of the yearbook committee.

Enriching Family Life through Home, School, and the Community. Bess B. Lane. Washington, D.C.: Public Affairs Press, 1957. Pp. xii + 121. $3.25.

This book was written primarily for parents of children aged 5 to 14 or those who are looking forward to their children reaching this age group. Divided into five parts, the book includes a number of general suggestions that provide a guide for any family. The book also will be helpful to parents' groups, teachers, administrators, and others who work with parents in any capacity.

Other Materials Received:

Elementary

High Roads, Sky Lines, and Bright Peaks. (Teacher's Editions.) Paul McKee, M. Lucile Harrison, Annie McCowen, and Elizabeth Lehr. Boston: Houghton Mifflin Company, 1957. Pp. 234 + 307, 258 + 340, and 238 + 340. $2.40, $2.52, and $2.52; respectively. Fourth, fifth, and sixth grade readers in the "Reading for Meaning" series.

The Bird Watchers. Marjory Sanger. New York: E. P. Dutton, Inc., 1957. Pp. 164. $2.75. An illustrated story on bird lore. Includes "Notes for Bird Watchers" with instructions for building bird houses and feeders.

Sure, I Want to Be a Better Writer. A handwriting improvement booklet available free from W. S. Sheaffer Pen Company, Fort Madison, Iowa.

Resource Handbook. Available from American Association for the United Nations, 345 E. 46th St., New York 17, N.Y. Pp. 20. $.15. A bibliography of books, games, and program aids for teaching United Nations and world understanding.

Secondary

Secretarial Practice for High Schools. Curriculum Bulletin No. 4, 1956-57 series, New York City Board of Education. Pp. 82. $.50.

General Earth Science for High Schools. Curriculum Bulletin No. 5, 1956-57 series, New York City Board of Education. Pp. 71. $.50.

SRA High School Placement Test. Available from Science Research Associates, 57 W. Grand Ave., Chicago 10, Ill. Provides five separate test scores.

Latin: A Structural Approach. Waldo E. Sweet. Ann Arbor, Mich.: University of Michigan Press, 1957. Pp. x + 520. $4.25, paper; $5.50, cloth. A new approach, applying the findings of structural linquistics to Latin.

College

How to Prepare for College Entrance Examinations. (Revised Edition.) Samuel C. Brownstein and Mitchel Weiner.

Great Neck, N. Y.: Barron's Educational Series, Inc., 1957. Pp. 213. $1.98.

Training of Primary Teacher Training Staffs; A Comparative Study. Geneva: International Bureau of Education, 1957. Pp. 202. $2.50.

Four Philosophes and Their Practice in Education and Religion. (Revised Edition.) J. Donald Butler. New York: Harper & Brothers Publishers, 1957. Pp. xvii + 618. $6.00.

GUIDANCE

Teaching. (Revised Edition.) William H. Burton. Cambridge, Mass.: Bellman Publishing Company, 1957. Pp. 40. $1.00. Discounts in quantity. No. 12 in the series of Vocational and Professional Monographs.

Guiding Students in the English Class. Elizabeth Berry. New York: Appleton-Century-Crofts, Inc., 1957. Pp. x + 438. $4.50. Explores the relationship between guidance of youth and teaching of English in the secondary schools.

GENERAL

The Eldest Child. Edith G. Neisser. New York: Harper & Brothers, 1957. Pp. xiv + 174. $3.50.

Education for Planning: City, State, and Regional. Harvey S. Perloff. Baltimore, Md.: The Johns Hopkins Press, 1957. Pp. x + 189. $3.50. Published for Resources for the Future, Inc.

The Teaching of Reading: An International View. William S. Gray. Cambridge, Mass.: Harvard University Press, 1957. Pp. 30. $1.50. The 1956 Burton Lecture.

The Flexible School; a Guide to School Planning. Washington, D.C.: Department of Elementary School Principals, NEA, 1957. Pp. 72. $1.25. Discounts in quantity.

Research Studies in Education, 1956. Compiled by Stanley B. Brown, Mary L. Lyda, and Carter V. Good. Bloomington, Ind.: Phi Delta Kappa, Inc., 1957. Pp. viii + 114. $3.50. A subject-author index and research methods bibliography.

Professional Organizations in American Education. Educational Policies Commission. Available from the National Education Association, 1201 Sixteenth St., N.W., Washington 6, D.C. Pp. 65. $1.00, paperbound. Discounts in quantity.

A Manual for School Board Members. Leonard E. Meece. Lexington, Ky.: University of Kentucky College of Education, 1957. Pp. 62. $1.

The School Administrator and the Press. Benjamin Fine and Vivienne Anderson. New London, Conn.: Arthur C. Croft Publications, 1957. Pp. 112. How to present school news which editors will use.

Ozarkian Philosophy. Robin L. Hunt. Silver City, N. Mex.: New Mexico Western College Book Store, 1957. Pp. 60. $1.00. Subtitled "Some Sense—Some Nonsense or Short Range Shots on Long Range Subjects," this booklet contains several humorous sections on education including "Pedagogical Platitudes" and "A Dubious Philosophy of Education."

AUDIO-VISUALS

Readiness Globe. A 26-oz., 12" globe especially designed and edited for the primary grades. Brilliantly colored. A. J. Nystrom & Co., 333 Elston Ave., Chicago 18, Ill. Available in several stands, $10.95-$15.00.

Course of Study in Winter Driving. Consists of a teacher's manual, visual aids, and a 13-minute movie, "How to Drive on Snow and Ice." For free manual and information on loaning or buying film, write Public Relations Dept., Seiberling Rubber Company, Akron 9, Ohio.

Enrichment Records: American Documents. 33 1-3-rpm, 10-inch, unbreakable records on the Declaration of Independence, Patrick Henry's speech, Lincoln's Gettysburg Address, and the Bill of Rights. Enrichment Teaching Materials, 246 Fifth Avenue, New York 1, N.Y. To schools and libraries, $3.96. Retail, $4.29..

Stars and Stripes on Display. 16 mm, sound motion picture, 14½ minutes. Indiana University Audio-Visual Center, Bloomington, Ind. Color, $150; b&w, $75.

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